





## Edinburgh Conversations defended

by Olga Wojtas  
Scottish Correspondent

going on in the East which even allows that kind of incident to begin, let alone to end in the horrific and terrible way it did, and what, if anything, has the West been doing which induces that kind of reaction in the Russians?"

In fact, the Korean tragedy was predicted earlier this year by the foreign

predicted earlier this year by Professor Erickson. There have been an increasing number of provocative incidents between the superpowers around the Soviet Union's Far East borders, Professor Erickson said in a Scottish newspaper report, and his department "predicted the probability of a superpower collision in 1985."

Dr Burnett added, while stressing that he did not wish to minimize the airliner tragedy, that the talks were intended to cover the wider issue of arms control. The British team this year includes General Sir Hugh Beach and Vice-Admiral Sir Ian McGeoch, and for the first time there are American representatives: Professor Eugene Rostow, of Yale University, the former director of the US Arms Control and Disarmament Agency, and Colonel Dr Lynn Hansen. The Russian team also includes a general and the editor of *Pravda*.

## 'Give priority to books'

The Government has been told by four eminent men in the world of books that the steep decline in library budgets in universities, polytechnics and colleges may be "fatal" to the progress of the nation.

The four have written to Sir Keith Joseph, the Secretary of State for Education, asking him to intervene to ensure book and journal provision is maintained, to support a strong British academic publishing industry and to urge local authorities and the University Grants Committee to give priority to books.

The letter is signed by Lord Wolfenden, a former vice-chancellor of Read-

**Design and Technology**

**D & T**

**Education and Training**

## Education and Training



**THE UNIVERSITY OF CHICAGO**

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## Research councils face efficiency drive

by Jon Turney  
Science Correspondent

Cost-cutting proposals for four of the five research councils have now been approved by Sir Keith Joseph, Secretary of State for Education and Science. The proposals, on stores, purchasing, estate management, workshops and library services, stem from separate scrutinies of the four councils under guidance from the Whitehall efficiency unit originally set up by Sir Derek Rayner. A composite report drawing on these reviews is published this week, with endorsement from Sir Keith.

The report estimates that the Agri-

cultural, Medical, Natural Environment and Science and Engineering research councils could save £3.3m a year and shed 211 jobs if all the recommendations are followed. This would be on top of a single saving of £5.3m from stores reorganization and sale of property.

Sir Keith has written to the heads of the four councils asking them to submit proposals for action on the recommendations in the original reviews by the end of November. Many of the proposals are opposed by research council staff.

The most controversial single proposal, the sale of Hermoncourt Castle at the Royal Greenwich Observatory's site owned by the SERC, is to be

considered by a special panel set up by the council's astronomy, space and radio board. The council argued that this suggestion should not be taken with the others as it had longer-term scientific implications.

The composition of the panel will be decided at a board meeting this week and it will report in time for the SERC's forward look next year.

Sir Keith has also asked for responses by next April on four more general suggestions to the four councils. These are for a new management audit; cross-charging of support services to reduce monies simply charged to overheads in an institution; and "proposals to incorporate an assessment of the value for money obtained

from research projects" in council reviews of different institutions' research programmes.

The last suggestion appears to raise particularly delicate issues about scrutiny of the conduct of research. It is understood to mean that review groups should consider whether research underway in council laboratories is being done in the most cost-effective way. Council staff have not yet had time to think how to do this.

Dr Keith Aldred, finance officer for the NERC, said this week that if the suggestion implied precise measurement it would be very difficult. "We will need to talk to the scrutiny team and see what they have in mind," he said.

## Expertise in short supply

by Paul Flather

The Government is desperately in need of expertise in international relations and should support an open market in ideas on foreign and defence matters, an international conference on conflict and peace studies was told this week.

Professor Paul Wilkinson, professor of international relations at Aberystwyth University, said many of the leading "new right" politicians and industrialists favoured the more utilitarian subjects such as electronics, computers and accountancy.

"They tend to regard studies such as international relations and history as misuses of time, not only because they are not in practical terms, but because these subjects are seen as inherently or potentially subversive."

Professor Wilkinson, giving a paper on the teaching of the history of conflict, said it was naive to think the present British Government welcomed a pluralistic competition of open market in knowledge and ideas on foreign affairs.

"They should do because the Foreign and Commonwealth Office, ministers, and the government bureaucracy as a whole, are in reality desperate for expertise on many areas of the world and aspects of international relations."

He was giving a paper on the opening day of a three-day conference at Christ Church College, Oxford, bringing together academics, defence experts from a number of countries, and civil servants, to review curricula and course development in peace and conflict studies in the UK.

Professor Wilkinson said there was now wide agreement that the history of conflict should be an important part of curricula in history, social studies and international relations. But cuts in such subjects at risk.

The greatest challenge facing international relations teachers was the "demythologizing of the history of conflict" from nationalist bias and prejudice, and from ideological "visionism".

They needed to guard against contamination of their work by propaganda, by preserving the academic freedom and independence of universities and colleges, by striving for objectivity, by comprehensive use of sources, and by studying more carefully the impact of ideologies on history.

He noted the emerging problems of shortage of people with necessary language skills to help in the translation of foreign materials. Shortage of Russian language experts in Britain and North America was now a "gross deficiency" he said.

Other papers at the conference dealt with the role of defence and strategic studies institutes, peace studies schools, the teaching of "peace values", and the importance of "studies".

The Workers' Educational Association's national executive committee has agreed to cooperate with the Department of Education in a new initiative to help decide whether a 2 per cent cut in budget can be imposed without harm to the WEA's districts.

The department asked the committee in a letter whether it would be prepared to recommend which districts would be best able to afford the £40,000 clawback announced by the government early in the summer.

Some of the WEA districts are known to be in financial difficulties and would be forced to make further cuts in closures and increase fees if the clawback were imposed across the board.

For this reason, the national committee has agreed to make a response to the department's letter and to provide some kind of recommendation about which of the 15 districts can afford a cut in budget.

## Majority vote sets seal on merger

by Karen Gold

The United Kingdom's first polytechnic-merger is to go ahead following a second 95 per cent majority vote in the New University of Ulster in favour of merger with Ulster Polytechnic.

The two votes—the first was in July—overcame the legal obstacles to the merger. In effect they disband NUU by calling for a joint petition with the polytechnic to the Queen for a new joint charter, and to form by the 1984/85 academic year a new institution to be called the University of Ulster.

The petition, draft charter and statutes are all due to go to the Privy Council by the end of September. Next month a proto-council for the new institution will be set up, in order to carry out detailed planning and to answer trades union protests that they have no employer with whom to negotiate.

Both institutions' 1984 prospectuses have been issued with a joint statement informing applicants of the likelihood of the merger.

Mr Nicholas Scott, under secretary of state for Northern Ireland who is responsible for education in the province, gave some last minute financial encouragement to the NUU court and the merger in a statement to the Northern Ireland Assembly's education committee.

As well as reaffirming his original promise that the institution would be funded at the 1983 joint level of NUU and the polytechnic updated for inflation in 1984, he not ruling out additional funding for 1985, he offered solutions to the severe financial problems threatened by superannuation

arrangements in the new institution. At the request of Sir Peter Swinnerton-Dyer, chairman of the steering group overseeing the merger, he said he would be sympathetic to the need for an additional £360,000 to pay for transferring public sector academic staff from their pension scheme to the universities' one.

That would cover the difference between the employer's contributions to the schemes. The once and for all cost of the transfer—rumoured at between £6m and £15m—would be found from within the public sector pension scheme and so would not be a charge on the new institution or the Department of Education.

But the difference in salary scales between polytechnic and university staff—calculated at a cost of between £150,000 and £180,000—would have to be found by the new institution.

Mr Scott also defended the composition of the University Grants Committee working party on Northern Ireland, telling the committee chairman Mr John Cusack that criticisms that it had too few Ulster members were premature.

In a veiled attack on the House of Commons Select Committee report on the merger, which recommended a freestanding institution in Londonderry based at Magee University College which is part of the new institution, he said: "I cannot overemphasize the importance that I place on Magee being a good strong part of the new institution... I think if the new institution were to come back to me and say they needed extra funds because of the special needs of Londonderry, I think I would look at that very sympathetically". Leader, back page

College row over councillor

The education convener of Tayside Regional Council, Mrs Barbara Vaughan, has resigned from her post at Dundee College of Technology after a longstanding dispute over her working hours.

She has officially resigned for "personal reasons" but it is understood she felt she needed more flexibility in her college timetable in order to carry out her council duties.

The vice principal, Dr David Kennedy, said the college was prepared to offer Mrs Vaughan a half-time contract of 16 hours a week as opposed to her spending four fifths of her time in college as had happened since she took over the convener post last summer.

The college had to insist on the essential principle that we must know in advance when she would be in the college and when she would not," he said.

Dr Kennedy added that there had been a deadline on Mrs Vaughan's acceptance of the half-time contract, but when this passed, the college assumed she intended to stay on her present contract, and heard nothing further until her letter of resignation arrived.

Mrs Vaughan was reluctant to comment on the details of the dispute, but said: "The situation has almost got to the point where, unless you have an extremely sympathetic employer, it is impossible to hold down a full time job and fulfil one's public responsibilities adequately, or, if one tries to, the pressures rub off both on one's work and on one's personal duties."

EEC plan to fund research

The European Commission plans to launch a new technological research programme and is inviting British industry, research laboratories and universities to take part. If approved, the new scheme will grant up to half the cost of basic research projects from early next year.

The EEC's aim is to promote research which, although still in the pre-competitive stage, shows clear industrial objectives. The commission says it will be looking for strong industrial commitment and funding, and for projects which involve organizations from at least two member states.

Private companies, research associations, universities and government laboratories will be eligible, but funding arrangements will vary from case to case. Normally, they will not exceed 50 per cent of costs.

The main areas of research proposed for the EEC programme are reliability, wear and deterioration; surface science and technology; laser technology; joining techniques; new testing methods; CAD/CAM and mathematical models; polymers, composites and other new materials; membrane science and technology and finally, catalysis and particle technology.

The commission will receive declarations of interest until late September, and a seminar to discuss the programme is to be organized by the Department of Trade and Industry.

## First: choose your problem...

by Jon Turney  
Science Correspondent

Choosing your problem is as important a skill as any other in research and two distinguished scientists last week offered advice on making fruitful choices.

Sir Hermann Bondi, chairman of the Natural Environment Research Council, emphasized how slim the chances are of finding a worthwhile problem to tackle. Speaking at a conference organized by the Science, Technology and Society Association on the theme of choice, he estimated that in pure, theoretical science, where problems are insoluble and 9/10 per cent are trivial.

"It is always the task of the academic to spot the half per cent where some headway can be made," he said.

Professor Martin Rees of Cambridge University agreed that students choos-

ing research problems had to be guided towards projects that were non-trivial but still manageable. In his field of theoretical astronomy, it was also essential to avoid the lure of fundamental problems which were not ripe for solution. "The people who fall most deeply into this theoretical trap are those we call cranks," he said. They tried to build a world-view from scratch without taking account of anyone else's work. The best way to deal with cranks who sought appraisal of their theories was to get them to write to each other, he suggested.

More seriously, there was a milder form of the disease, common among the brightest undergraduates—a conviction that only the real fundamental problems were worth tackling. They should multiply the importance of the problems by their chances of making any impact on it, Professor Rees advised.

He also tried to point students towards problems suited to their individual styles of thinking. In astronomy, for example, projects varied widely in their calls on mathematical, physical and computing skills.

Once a tractable problem had been chosen, it was unlikely that outstanding brilliance was needed to make a contribution to the field. "The person who invented the zip fastener made as much of an intellectual leap as most theoretical physicists," he said.

Sir Hermann put these decisions on choice of theoretical problems at one end of a spectrum, the end where public involvement in selection should be kept to a minimum. He recognized the right of the taxpayer to have a say, but the sums put aside for pure or cultural research needed as little public involvement as choice of pictures for the National Gallery. This is scientists' science," he said.

Academic freedom meant appointing people on their track record of successful problem choice and then leaving them free to choose their own work.

## Slump in book prices 'shortlived'

by Paul Flather

Academic books prices appear to have fallen during the past six months against all recent trends, according to the latest six-month survey.

But researchers at the Centre for Library and Information Management based at Loughborough University are convinced the reverse is a temporary hiccup caused by a current "clean-up" in the British National Bibliography statistics.

The CLAIM report analyses book prices over the first six months of this year and reveals that while prices have gone up 15 per cent in the last five years to an average of £12.46, in the last six months the average figure has dropped from £14.29.

The surveys are based on the BNB catalogue. In the past six months a significant proportion of books with pre-1982 imprints have appeared as the British Library has made efforts to catch up on all outstanding books which it should receive free by law.

Ms Lawrance Wood, a research assistant at the centre, said the latest figures had to be regarded with caution. "It is too early to say book prices are definitely dropping. The clean-up in the BNB is definitely having an effect," she said.

The proportion of pre-1982 books is about 35 per cent, with some books dating from 1978 and 1979. These bring down the average price of books.

The latest survey also shows that the proportion of books costing less than £8 has risen from 37 to 49 per cent in the past six months, again reversing a general trend since 1978 when the proportion fell from 51 to 49 per cent.

A pamphlet last year claimed book prices had risen by 74 per cent from 1974 to 1980 while tobacco, fuel, and car prices had risen 150 per cent. Rising paper, print, and binding costs are blamed by publishers.

The TONY McLEAN fund will enable students enrolled on classes organized by the school of continuing education at Kent University and the south-eastern district of WEA to attend residential courses by meeting part of the cost. Further contributions should be sent to Jack Woolford, Secretary, TONY McLEAN Memorial Fund, 1066 Green Lane, Temple Ewell, Dover CT16 3AR.

changed to the Economic and Social Research Council. He argued strongly there was no need for a change. Other council members felt duty bound to head the Government's wishes.

Sir Frank is greatly admired by the Prime Minister, Mrs Thatcher, with whom he built up a good relationship while part of the inner group which ran the Falklands campaign.

Cooper resigned suddenly from the SSRC

Sir Frank Cooper, former head of the Ministry of Defence, has resigned from the Social Science Research Council in a surprise move just five months after he was appointed.

Sir Frank's appointment was itself made amid some controversy after being delayed for several months because of apparent attempts by the Prime Minister's Office to persuade him to take on "more serious work".

His resignation is now put down to pressure of work, partly accumulated through appointments made while he waited for a final decision on his SSRC post.

Ironically he precipitated a major row at his first SSRC meeting by refusing to go along with the majority view that the council's name should be

## Universities raise more private funds

The universities reduced their reliance on Government funds significantly in 1981/82, according to statistics published this week by the University Grants Committee.

Income from sources other than fees and exchequer grants rose by 6 per cent over the previous year and by 128 per cent compared with 1976/77. The rising number of overseas students charged the "full-cost" rate also resulted in a big increase in income from fees.

The proportion of recurrent income yielded by research grants held steady after a fall in 1980/81. It represented almost 13 per cent of the total universities' income of £1,720m, with London, Oxford and Cambridge leading the field. Bristol, Southampton and Sussex also received more than 15 per cent of their income from research.

The statistics show the salaries of academic-related staff rising fastest of the five groups listed over the five-year period up to 1981/82. Their pay rose by 121 per cent, while the academics received increases adding up to 115 per cent. Secretarial and clerical workers' pay went up by 87 per cent.

The total number of full-time students topped 300,000, compared with 298,700 in 1980/81, while part-time numbers rose almost 4 per cent to 33,200. Continuing education courses are also shown to have increased, with 440,000 students involved.

University Statistics 1981/82, Volume three—Finance, 27.50 from the Universities' Statistical Record, PO Box 130, Cheltenham, Glos.

Electronic aids

An exhibition of electronic aids for disabled people organized by the Handicapped Persons Research Unit at Newcastle Polytechnic was opened this week by Lord Glanara. Funded by the Department of Industry, it contains both high-technology computer aids and battery-operated ones.

Further information from: Handicapped Persons Research Unit, 1 Coach Lane, Newcastle upon Tyne



## 'Shock of the new' for art college

Bournemouth and Poole College of Art and Design are close to achieving the impossible with the opening of completely new premises for the college in a couple of weeks.

The £44m building on the Walsdown site is intended to be the first phase of new buildings for the art college and will house the departments of photography, film and television, graphic design and technical and natural history illustration, the library and

administrative block. The opening of the site, planned since 1976, has been delayed by building problems but that has not prevented some profit being made from the sale of top surface shale which was removed in the landscaping of the site.

The decision to build completely new premises for the art college was taken by Dorset County Council as part of its scheme to group all its colleges on the same campus as the Dorset Institute of

enterprise counsellor to discuss students' projects and Professor Cannon praised the time and effort they had spent on the scheme.

Revised proposals, vetted by local panels of university staff, professional firms and local business people were submitted to a national panel chaired by Sir Monty Finniston, which selected 20 proposals involving 26 graduates.

Professor Cannon said one fifth of the graduates on the scheme were female, while at present only two per cent of small businesspeople were

Higher Education.

Mr John Murphy, acting principal of the art college, said that the opening of the new building was largely a result of the support of the local authority. He said that the cost of the new building had been met without detriment to any courses.

From left above, Jo Cole, president of the student union, Phil Dyke, architect and Mr Murphy.

Graduates get help with a small beginning

A unique venture to help Scottish university graduates set up their own small businesses was launched through Stirling University this week.

Twenty-six graduates will now undergo an 18-week training and development programme valued at £5,000, sponsored by the Scottish Enterprise Foundation, formed at Stirling a year ago and backed by both the public and private sectors.

The graduates' business proposals include computer-assisted learning in schools, a health club, a dance studio

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## Overseas news

## Research projects lose federal funding

from Geoff Maslen

MELBOURNE

Up to 500 research projects in Australia will miss out on federal funding next year despite a 17 per cent boost to the Australian Research Grants Scheme budget. The federal government finances the scheme, which allocates money to Australia's top university research projects.

Altogether 1,000 projects that will get money will receive on average 25 per cent less than the ARGS committee considers adequate. Professor Peter Sheehan, the chairman of the committee, said that requests for \$522m worth of research had been received but only \$522.4m would be available from the federal government. This represented an increase after inflation on only 5 per cent and fell short of the 10 per cent real increase promised by the Labor Party before the election.

Professor Sheehan said he welcomed the increase but it was not enough. "I doubt very much whether some areas of basic research are being met at all in Australia because of the lack of fund-

ing," he said. The scheme had lost the ability to finance big new projects worth more than about \$200,000 and these could no longer get government support. As an example, Professor Sheehan said there was no money for new projects in particle and intermediate energy physics.

The ARGS was set up in 1967 to finance high-cost basic research and since then has been the prime source of income to the cream of Australian scientific research. But in the past 16 years the average value of grants under the scheme has fallen from \$47,000 in today's prices to only \$16,000 last year.

The allocation to the ARGS this year is particularly disappointing to those in the basic sciences because of the continued increases in finance for medical research. Next year, the National Health and Medical Research Council will receive a 28 per cent increase in its funds, bringing the amount it can allocate to \$536m. But the government's decision to provide 50 special research fellowships was welcomed by Professor Sheehan, as the first step in implementing a

pre-election promise to provide 300 awards. Meanwhile, six of the ten special research centres set up by the former Fraser government in 1981 at a cost of \$160m could face closure at the end of next year.

The federal minister for education and youth affairs, Senator Susan Ryan, has questioned the dominance of medical and cancer research in the centres and has said their future would be reviewed when the initial grant money ran out.

But university academics claimed that any decision to cut off money to the centres would mean that millions of dollars of taxpayers' money had been wasted. The head of one of the centres, Professor Ian McKenzie of Melbourne University, said half of his team of 50 researchers would lose their jobs if federal money cut out.

The 10 research centres were established by the Fraser government amid considerable controversy in the higher education community. The government made an initial allocation of \$160m to the centres to be spent over three years and indicated that further

grants would be made after 1984. But Senator Ryan said each of the centres would be assessed on its merits before any more money was provided. She said establishment of the centres reflected the particular ideology of the Fraser government.

She said that while any decision on the future of the centres would be a matter for consultation with those concerned, she did not think the range of research covered by the centres was adequate. "There is a dominance of medical and cancer research and very little in, say, labour market research or research related to new technology and new industries that we are interested in."

In fact, of the 10 centres chosen from 327 applications around Australia, six were in the medical-biological field and they ranged from cancer, nerve cell and genetic research to plant cell investigations.

At the time of the proposal to set up the centres, the Federation of Australian University Staff Associations attacked both the idea of setting up the centres and the choice of those nominated to receive the \$160m.

## Scientists face job transfers

Ontario universities will benefit by the provincial government's decision to decentralize its forestry, fisheries, wildlife research operations.

University research contracts expected to replace much of the house research now carried out by the ministry of natural resources, already depend heavily on university in the province for their research needs.

Fifty scientists now employed by the ministry will be affected by the reorganization. They are likely to be transferred, as a group or in disciplinary units, either to existing academic research facilities or to a new research institution established by the government in cooperation with one or more universities.

The University of Toronto, which recently received \$30m from the provincial government towards the creation of a natural resources centre, is seen as a possible outlet for the expertise released by the ministry. Lakehead University could also benefit.

## Filed down

Scholars seeking access to the official personal papers of former United States president Mr Richard Nixon will have to wait two more months while a former chief of state reviews them to determine which, if any, he will object to for public scrutiny.

The National Archives was to release the 628 cubic feet of papers next week. But for Mr Nixon said that the volume of manuscripts and his former president had not yet had a opportunity to adequately review the bulk of them. He and other concerned with the memoranda are entitled to review them and file protests if they release would violate any "rights, privileges or defences".

## Youth review

Sir Richard O'Brien, the chairman of Britain's Engineering Industry Training Board and a former chairman of the Manpower Services Commission, will be part of an OECD team to review Australia's youth policies and pay rates in November.

## Honorary degree

The oldest university in Europe, Bologna, whose origins date back to 1088, has awarded an honorary degree in medicine to Professor Wilhelm Kroll, who invented the artificial kidney in 1956. Over 250,000 people throughout the world suffering from chronic kidney insufficiency owe their survival to his invention.

## Back home to the bomb blasts

by John O'Leary

The man who occupies arguably the world's hottest higher education seat returned home this week unsure whether his office had been blown up or when his university would be able to open again.

Professor George Tohmé, president of the Lebanese University, had been in Britain for a fortnight doing biological research and trying to set up new relationships with British universities. His trip, under the auspices of the British Council, provided a well-earned break from the dangers of life in Beirut but only postponed the difficult decisions he must make about the immediate future of the university.

If he needed to be reminded of the problems he would face on his return, Professor Tohmé received a second-hand report while in London that his office had been bombed. He had no idea of the extent of the damage but he joked that he hoped something remained since he had arranged to meet his deputy there for a discussion on the prospects for the start of the new academic year.

Professor Tohmé had been receiving less than optimistic assessments from his daughter of the chances of a prompt start. Regular telephone conversations told of the fighting around Beirut and he resigned himself to the likelihood of another delay. The last academic year could not begin until January, rather than October, because the troubles had caused the previous year to overrun.

Professor Tohmé took over the presidency in 1980, having been at the university since 1969. In 1976 the university was closed for the whole year; in 1981 the main Zakhali campus was badly damaged; in 1982 it was Tripoli's turn and then Beirut's. But nothing has shaken his resolve nor, apparently, that of his staff, to maintain high academic standards in the Lebanon.

In 1976, when their house had been hit three times and a close relative killed, the Tohmé family fled to Paris. Mrs Tohmé also an academic, stayed for a year with the three children but her husband returned immediately to plan the reopening of the university.

Since then, like most families in Lebanon, they have known further grief but have adjusted to the new circumstances. A cousin lost both his legs in an explosion in 1978, for example, but is now in the fourth year of his medical degree.

The university, too, has adjusted. The Council of Ministers has taken over the functions of the old university council but has not interfered with its running so far. It has sanctioned regular sums for the rebuilding work which has now become commonplace as the university buildings are caught in the crossfire.



Dr Tohmé in London with Sir John Burgh, the director general of the British Council.

Worst hit has been the faculty of sciences, in Beirut, which presently houses British marines and has been the target for some recent attacks. It has now been rebuilt four times and the total cost of replacements last year ran into millions of pounds. The whole area around the faculty was devastated in 1982, leaving the site devoid of trees or grass.

The education faculty, the oldest in the university, was also badly damaged then and its irreplaceable library of 25,000 books completely burned. The faculty of letters, too, suffered extensive damage, but the entire university was repaired to the extent necessary for a reopening in three months.

This time Professor Tohmé concedes that the situation is potentially more dangerous, but he claims that the university could be open within a week of the fighting ending. In the past all the university's 30 "branches" have closed as soon as any has been forced to abandon teaching, partly because the nationwide institution operates common curricula with identical examinations, but this policy may have to be revised.

The university, which now has some 40,000 students in four widely-spread centres, expanded its number of teaching sites when the troubles re-

started in the 1970s so as to cut down the amount of travelling time required. Extensive shelters allow staff and students to be relatively safe in the university precincts: it is the journey to and from classes which spells the greatest danger.

There is little trouble between the students, despite the mixture of Moslems and Christians which exists on almost all the campuses. The academic staff, all of whom must possess a doctorate and teach in more than one language to qualify for a post, are similarly mixed.

In some ways it seems that the staff have been invigorated by the war. The number of publications has increased markedly, one cooperative venture with the US University on brain research, producing 11 papers in two years. But the violence has taken its toll. Three professors have been killed in the last year, one mistaken for a terrorist and shot by the army.

Professor Tohmé is still hopeful that the new academic year will get under way next month. If not, he says resignedly, the university will wait until ministers believe that it is safe for the students to travel. Academic programmes will run their full course, no matter how long it takes.

## Environmentalists protest at altered gene experiments

from E. Patrick McQuaid

CAMBRIDGE, Mass. Exhibited as an ornamental curiosity at the 1876 Philadelphia Centennial, the Japanese vine kudzu caught on fast with American farmers. Through the 1930s the seemingly indestructible vine was used to control erosion in the deep south but has since crept unchecked through most of Dixie and is today swallowing cars, strangling power transmitters, and camouflaging entire buildings if unattended.

The action was filed in the Federal District Court of Washington and is bolstered by affidavits from some of the nation's leading ecologists and botanists. Mr Eugene Odum of the University of Georgia and Mr David Pimental of Cornell testified that, while not opposed to Mr Lindow's experiments, the effects of engineered organisms in the environment should first be tested by the government's environmental protection agency.

The new bacterium could prevent the formation of frost crystals on vegetation at temperatures as low as 23°F. With most frost damage taking place between 24°F and 30°F, the microbe has considerable commercial appeal. The experiments by Berkeley's Mr Steven Lindow are partly funded by

the advanced genetic sciences company and have been approved by the government's National Institutes of Health. The opposition - the Human Society of the United States, the Environmental Task Force Inc., Environmental Action Inc., and the Foundation on Economic Trends - all private groups - worry that if the bacterium were to find its way into the upper atmosphere it could disrupt the natural formation of ice crystals and impact on global climate.

While admitting that this is their worst case, four environmental organizations are suing the federal government in an attempt to stop experiments from the University of California that would release a gene-engineered microbe into the environment to test its ability to deter frost damage against plants. The Berkeley test would be the first time the product of altered genes would be sent into the environment.

Some of our most significant problems are of that nature," reads the suit. "These include the kudzu weed, the chestnut blight, the gypsy moth, Dutch elm disease, and starlings and house sparrows, which were agricultural pests."

## Students demand Chinese assurances

Fourteen representatives of the Hong Kong University student union last week demanded that freedom of speech and democratic self-government should be assured under any agreement for the future government of Hong Kong. They were meeting with Xu Jiatun, director of the Hong Kong branch of the Chinese Xinhua news agency.

The students said that to some rulers "to stop the mouth of the public is more important than stopping a river." In the event of the return of Hong Kong to China, residents must still be allowed to "express their dissatisfaction over unreasonable things." This, they said, even included the right to strike. Since students, they said, are not as a social stratum involved with any personal interests, the students would take the stand of the majority of residents, and therefore continue to express its opinion. At the same time, it would maintain its political independence.

The students demanded that the contents of the recent Chinese-British talks on the future of Hong Kong should be made known to the public as soon as possible. Xu Jiatun replied that, although the social life of Hong Kong would "basically remain unchanged" specific details have not been worked out.

## Overseas news

## Swedish loans inadequate

from Donald Fields

STOCKHOLM

Airing grievances that would provide ammunition for British opponents of the student loan system, Swedish undergraduates have been stepping up their campaign against the "inadequacy" of the financial assistance they receive from the state.

They contend that the squeeze, by hitting hardest at those from low-income families, is leading to a regression in the social structure of university enrolment that deviates from the Social Democratic government's egalitarian ideals.

The scale of the problem is evident from the impressive publicity accorded to a Stockholm university student union press conference designed to show how far student loans had lagged behind the overall inflation rate of the last few years.

If you confine the comparison to the main items of student expenditure - housing, food, books - then the gap is still wider," Eva Garland, the union's social secretary, said. "We reckon the average student's monthly budget now shows a SKr800 (£68) deficit. Lots of students are quitting because they can't finance themselves."

This problem is now deemed one of the key factors behind the relatively high incidence of drop-outs from Swedish universities. Recent studies indicate that 30 per cent of students experiencing problems put the principal blame on financial hardship. It is likely that a sizeable share of eligible youngsters who do not take up places at universities feel the expense is beyond them. "Students are coming increasingly from the upper class," Ms Garland said.

Swedish students are now convinced that their own material wellbeing has fallen beneath that of counterparts in neighbouring Norway. Thanks to a combination of last October's 16 per cent devaluation of the krona and a strong dollar and sterling, the cost of text books has risen by around 50 per cent in one year.

When Sweden launched its student loan system about 20 years ago, the government and Riksdag (parliament) pledged that the standard of living for students should be in line with that for low income groups. Using one of its favourite yardsticks - playground supervisors (who are themselves under pressure thanks to economies that compel them to take charge of more children) - the Stockholm students now find themselves SKr 1,000 (£85) a month behind.

They want a fresh government undertaking that money for students will be permanently linked to the average at the bottom end of the incomes scale - but they fear the government, only 69 per cent of whose expenditure is currently covered by revenues, will remain passive. People aged over 25 make up about

## Catholics dip into pockets

from Philip Willan

ROME

Financial problems continue at Italy's Catholic University of the Sacred Heart, despite church collections throughout the country which raised 1.5 billion lire (£6m).

Although the university receives money from both national and local government and charges its students higher fees than the state universities, the additional money received through the church is still well short of the amount needed.

The university was founded in Milan in 1921. Partly through the efficiency of private enterprise and partly through its more rigorous selection procedures it has avoided the overcrowding and declining standards that have characterized the state universities in recent years.

Though the headquarters of the university is still in Milan, there are now small faculties in Piacenza and Brescia as well as the prestigious medical faculty in Rome. The medical faculty opened in 1961 and is attached to the Gemelli Hospital, one of the largest and most modern in Rome. Doctors and students are expected to adhere to Catholic teachings.

The eyes of the world were focused on the hospital in May 1981 when Pope John Paul II was treated there for gunshot wounds after the attempt on his life. But according to medical dean Ermano Manni, several Communist Party deputies have shown their faith in the prowess of the Gemelli's doctors and chosen to be treated in the Catholic University hospital.

Manni attributes the Gemelli's high standards to its rigorous entrance requirements, based partly on continuous assessment at school, partly on a multiple choice written examination and partly on an oral exam. "We take a limited number of students, only 180 per year." He believes that in contrast, entry to state universities has been made far too easy. "The state university has been demolished in recent years," he says. "Many of the problems come from the medieval (school-leaving) exam being made too easy. The filter has been removed, but the universities were not equipped to cope with such a mass of people."

Manni cited the medical faculty of Sassari University in Sardinia where he was teaching until recently, as an example of the university boom. In 1973 less than 100 medical students were admitted while 10 years later 400 are given places, but with no corresponding increase in facilities. "Here the university was designed for 180 students a year and it takes no more." And he adds: "It's dangerous to produce badly trained doctors."

The undoubtedly high standards of the Catholic University are its surest defence against periodic threats to nationalization.

## THES PEER REVIEW

The THES has undertaken two surveys to discover how academics in eight disciplines regard the standing of their subjects. The results, giving both teaching and research ranking in architecture, chemistry, civil engineering, economics, French, history, physics and politics, were published in the THES of 3.12.82 and 5.8.83. The two reports are now available in one six-page reprint (four pages of editorial matter) price 80p.

Inquiries should be addressed to Frances Goddard, THES Peer Review, The Times Supplement, Priory House, St John's Lane, London EC1M 4BX.

The price includes postage and packing within the UK but not Red Star or hand delivery.

## Black students clash with police

from Carolyn Dempster

JOHANNESBURG

Two of South Africa's largest black ethnic universities have been stricken by student unrest following demonstrations and marches to commemorate significant dates on the calendar of black politics.

At the University of the North in the black "homeland" of Lebowa, a meeting held on June 16 to commemorate the infamous 1976 Soweto riots resulted in a violent clash between students and the Lebowa police.

The conflict, which led to a number of students being taken to hospital, came in the middle of the university's scheduled examinations. Since then the campus has been the scene of mass class and exam boycotts and last month the authorities closed the university for the third time in eight months because of the student unrest. The deadlock between the authorities and the students continued well into August. The matter was only partially resolved when a court ruled that two students, dismissed after the June 16 unrest, be readmitted. However the simmering discontent among the student body has not abated.

This week, at the black University of Fort Hare in the Ciskei "homeland", a protest march to commemorate the death in detention of black consciousness leader Steve Biko, led to violence and boycott of lectures by all students.



Black students burn the South African flag.

The march, by about 250 students, took place on the night of September 11, when 45 of the 250 demonstrating students were arrested by Ciskei police.

By Monday, the entire student body of 2,000 had come out in support and refused to attend classes. The boycott, now into its fourth day, is still continuing.

The university authorities have not yet stated what action they plan to take for the 45 arrested students, but a trial date for September 27. Charges are of public violence and holding a gathering which constitutes a riotous assembly. In the melee a number of university hostel windows were broken and two female students were taken to hospital.

## Graduates lack a driving force

from E. Patrick McQuaid

En route to a conference on video games at Harvard University recently, there appeared one of those unique individuals who have ingrained themselves into the folklore of American academia.

A thin trail of blue smoke, seemed to be one of the flashier tabloids, but as the cab driver put it aside to flip on the meter it turned out to be a copy of *The Chronicle of Higher Education*. It was open to the positions available section, inviting a conversation that could not be passed up.

After earning his PhD in engineering, he worked the computers circuit a few years along Route 128, the beltway skirting Boston known as America's industrial highway. Tired of the frantic pace and the pressures of competition from inside and outside the company, he quit to find a teaching post. He'd been driving a taxi and scanning the back pages of *The Chronicle* for several months now.

The last decade saw a drop of more than 9 per cent in the number of scientists and engineers who earned doctorates, leaving American colleges and universities teachers in short supply to handle this decade's record enrolments in engineering subjects. There is little hope on the immediate horizon, according to a survey from the American Association of Engineering Societies and the American Society of Engineering Education.

Members of the Tau Beta Pi, an association of the country's highest-ranking engineering graduates, were polled to determine their interest in teaching. Only 2 per cent of the 694 respondents who earned undergraduate engineering degrees in 1977 said that they had earned advanced degrees and were now teaching. Of the 918 who graduated in 1982, only 7 per cent indicated that they would choose a career in teaching.

These were statistically sound samples, according to Mr John Geils, who reported the findings. Some 2,000 members of each class were asked to complete the questionnaire with 35 per cent responding from the class of 1977 and 46 per cent from the 1982 crop. The two particular classes were selected, explained Mr Geils, to get a broad range of graduates and a seasoned set who had been out of university for five years.

Other data showed that 45 fields of engineering were represented in the class of 1982, and 40 in the class of '77. Electrical engineering was the most popular field in each class with mechanical and civil engineering vying for second place.

Computer engineering and computer sciences had a very low showing in

each class. In 1977 only 1.4 per cent of the graduates were foreign nationals while by 1982 some 6.1 per cent of the graduates were not American citizens.

In ranking the factors that influenced their decision to accept employment rather than enter full-time graduate study, most students indicated that they were anxious to apply engineering education or couldn't turn down a high salary offer in industry. Other factors included the opportunity to earn an advanced degree part-time.

Members of the Tau Beta Pi were more likely than others to become teaching posts, said Mr Geils. "The lack of interest in engineering teaching by this group obviously raises the questions of how to make academic more attractive," he said.

A number of remedies had already been proposed, he continued. But solutions such as equalizing salaries, updating laboratory equipment, providing more postgraduate training, teaching stipends, developing all manner of "perks" such as home subsidised mortgage arrangements and lake into consideration broader cultural

questions, he said.

Mr Geils asks in his report whether present and foreseeable economics were going to determine that ever-changing equipment would be found more exclusively at the industrial rather than the campus site. Had the status and image of a professor been unalterably changed since the 1960s? Did the American ethic and the rapidity of all change combine to profoundly disorient prospective teachers and to define "achievement" in more immediate terms? Did instructional technology now being addressed and rapidly developed indicate that teaching was soon to take place in a structure very different from the traditional classroom? Should qualifications for teaching become more flexible?

The survey was carried out as part of the larger project on engineering college faculty shortage, directed by Mr Geils. Co-sponsored by the two engineering associations, it has also received funding from 11 multinational corporations - AT&T, T. Du Pont, Exxon, General Electric, General Motors, Hewlett-Packard, IBM, Rockwell International, Union Carbide and Weinschel Engineering.

The problem is defined as a critically

insufficient supply - less than 500 an engineering PhDs for more than 1,000 faculty openings as the autumn of 1983. In addition there is a severe shortage of engineering graduate students in the pipeline for a PhD degree.

The full, final report of the group's two-year study, which will suggest ways to encourage engineers to seek teaching posts, is to be issued soon.

Some of the answers respondents gave in the survey included:

- a desire to work on practical, "real world" problems;
- finding graduate school too expensive, no decent fellowships available, and couldn't afford to go full-time;
- feeling "burned out" and needing a break from education;
- being tired of being poor and broke all the time;
- disliking the high pressure, low salary during first few years of teaching engineering;
- discovering that their school wouldn't hire its own students as teachers and therefore being forced to quit;
- counting across foreign studies working for "peanuts" while in graduate school;
- liking large complex projects, but finding that academic saw only narrow projects.

مركز التعليم





Bedford College's former site in Regent's Park, London.

There had to be permission to cross the runway but the departure lounges from Heathrow airport now stand at Egham, temporary academic accommodation for the merging Bedford and Royal Holloway colleges.

The use of airport cast-offs only implies urgency and imagination from the staff of the two London colleges. Although some of their other "temporary" pre-fabs have been designed to last some 60 years, the new institution, just outside Windsor, will be the only British university to benefit from a major building programme for many years to come.

Bedford College is selling up and moving from its beautiful Regent's Park site in London to the Royal Holloway College, some 20 miles away in 97 acres of wooded parkland at Egham, Surrey.

They have much in common; both are set in parkland and both are former women's colleges which allowed men in during the 1960s. They are about the same size and the new institution, still unnamed, will have about 3,000 students. Both have strong traditions - at Holloway a famous painting in the gallery used for examinations is covered with the Union Jack because of the legend that sitting near it brings failure.

But at the beginning, the suggestion that the two colleges should unite was greeted with disbelief.

For Bedford, pressing financial problems made merger with another college the only apparent way out. If no action had been taken, there was an anticipated deficit for 1982/83 of £1.4m.

There was also a growing feeling that small colleges had had their day. Larger departments, particularly in the sciences, were better for survival.

So the college started looking round for a partner. Inevitably, its first glance was towards Westfield College, based at Hampstead. The colleges were both about the same size, both former women's colleges, and had had close relations for many years; sharing equipment and facilities. Westfield had a healthy balance sheet.

The first discussion with Westfield took place with Professor John Black, Bedford's former principal. He announced his intention to retire and a committee was appointed to find his successor.

Then there came pressure from London University. Both Lord Annan and Professor Randolph Quirk, the outgoing and incoming vice chancellors of London, wrote and then personally appeared in the appointments committee to say that Bedford should not appoint a principal, but let Bryan Thwaites, the Westfield head, run the two colleges.

But the pressure was resisted. Bedford thought that they would be in a dangerous position without a principal. They appointed Professor Dorothy Wedderburn.

The talks with Westfield continued but separate talks also began with King's College, London, and the prospect of this merger seemed much more exciting.

Bedford and King's signed a declaration of intent but after a short period it was clear that talks were going nowhere and they failed.

It is still unclear why they did. Many Bedford staff think the King's physics and chemistry staff actively opposed it. According to Dorothy Wedderburn: "I think King's academics were not convinced they needed to merge with anybody. It was also more difficult to communicate within the college. Also some of the scientists there pointed to what they thought were some of our weaknesses."

## Room with a different view

### Bedford and Royal Holloway colleges will be starting the new term together - Ngaio Crequer looks back on the merger

"On our side there were real problems about the King's site that were becoming apparent to us. Increasingly we realized that financially we were not going to produce the savings we thought we would produce."

For a while there was a shocked silence at Bedford. But then up came the name of Royal Holloway College, about the same size as Bedford, with a similar balance of subjects, and set in beautiful surroundings, but 20 miles away. Randolph Quirk, who seems to have spent much of his vice-chancellorship as an eager estate agent, strongly backed this new merger and was brought in to try to "sell" it to the staff.

Meanwhile at Holloway, though their decision to partner Bedford was less painfully arrived at, it still caused some heart searching. In their case their financial situation was healthy.

In June 1981 it was becoming apparent that the smaller colleges would suffer more than larger ones in the cuts. As Dr Roy Miller, principal, put it: "In a small college with small departments, there is a certain level beyond which you cannot go. So we decided we should invite other small London colleges to join us, primarily in a science consortium."

### Randolph Quirk in the role of agent

Initially there was not a great deal of interest. The college also carried out an academic exercise to see which colleges might suit them. Bedford did not figure. At the top of the list was Westfield, then came Chelsea and Queen Elizabeth College.

The college also began serious discussions with Brunel University. This was an obvious choice at least because Holloway is so close to Brunel's Shoreham site. The institutions went a long way towards identifying areas of academic overlap and collaboration but there was one crucial stumbling block: Brunel is not part of the University of London.

Holloway particularly valued its membership of London and did not want to give it up. "We had reached the stage of trying to find ways of overcoming that when the rest of London began to catch up with the need for mergers to take place," said Dr Miller.

Bedford and King's talks foundered and in January 1982 Bedford and Holloway started to talk.

Bedford's task was then much the greater. They had to make a great emotional sacrifice and move from their Regent's Park site, and also out of central London.

There was a bitter period with angry meetings. Former students lobbied hard to try to stop the move. Other mergers were put forward, Dorothy Wedderburn had to be tough and uncompromising.

The first governors meeting did not produce the necessary constitutional majority (though a simple majority) to the other side lobbied and they got the decision the second time. Nevertheless quite a number of people still do not want to go to Egham and they are taking early retirement.

Academically, the merger is sound sense, with a wider range of subjects possible, and teaching times bigger and stronger. The new college will be one of only five sites in London selected as

areas for the concentration of science teaching and research, and this by itself will mean better students and staff attracted.

But some of the new college's distinctive subjects are being lost because of "asset-stripping" of Bedford by other colleges in the wake of horizontal academic plans. Dutch is going to King's. The new institution will have no law, economics or philosophy.

Some mathematicians are going to UC, but others will take their place and there will be transfers of chemists and physicists to Egham. They just hold on to Italian to join French and German in a modern languages school, and classics should remain strong.

Of crucial importance is geology. The majority view of the working party, accepted by London University senate after lengthy protest, is that Bedford/Holloway should be the site of a major geological development. A minority wanted it to go to the merging Chelsea/Marjorie site. It is a major gain for Egham so long as King's will give it up.

The university has offered the new college Bedford Square in central London, essential at least for maintaining medical sociology, where access to hospitals is necessary.

Professor Inga-athia Ewbank is head of Bedford's English department. Her department moved to Holloway less than a month ago. "A great disappointment was losing Dutch. And the loss of philosophy was a blow to the whole faculty."

"But there are also opportunities. We will have drama, which we did not have before. We were very small before, almost non-visible. There is also music, a new centre for Victorian arts, and we will be able to start a new MA in linguistics and stylistics."

"She feels the loss of central London, and thinks the students will need extra encouragement to go to visit galleries etc. They are trying to get British Rail to put on a later train so they can see place."

She has noted a mixed reaction from students. "Those who had been at Bedford for a year were not very happy. They were established in London, had flats etc. We could not enforce residence at Holloway, we gave them a free choice. Out of 30 only four will live at Egham. The rest will commute."

"The college will be organizing a free bus service. We are giving them some seminars and tutorials in Regent's Park. It means members of staff putting themselves out, but willingly."

Professor John Pabbie, Bedford's dean of sciences, thinks the merger has enormous possibilities. "London University is changing fantastically. We will have only five multi-faculty schools and this will be one of them."

"It is on a site which has a great deal of space around it, a lot usable so there is enormous potential. There is the possibility of a science park, and the fact that we will be a key centre for geology is very exciting."

Prospects of academic gain are echoed at Holloway. Kevin Livesey, college accountant, said: "One of the objects of the merger is that you can make something bigger and better out of this. This site was planned to be the size of the merged college in the Murray proposals 20 years ago; pre-Robbins. So we have always been

thinking of this kind of expansion."

The merger has also affected admissions, with some students under the impression that Bedford is closing. Next week the joint colleges are holding a press conference to stress the new institution's impressive future.

Applications to Holloway have been slightly higher than in previous years but at Bedford they have dropped considerably. In some areas the drop has been between 10 and 12 per cent, and in a few subjects where the intake is anyway very small, the fall has been as much as 50 per cent.

Mr Les Turnbull, Bedford's secretary said: "It is understandable, we expected it. We know that in schools the advice is not to apply to London because it is all too confusing, you might start in one place and end up in another."

"But there is no problem filling our targets. We have not dropped our entry requirements at all. Our average A level scores are the highest we have ever had. A lot of people are saying how good it is to get a University of London degree in a campus university."

One of the very real problems for the merger is tenure, and it is interesting to note a slightly different attitude between the Bedford and Holloway administrators.

Briefly, Holloway has strong tenure (though this is questioned by Wedderburn, a lawyer - "It is possible to read it that they are under three months' notice") and Bedford weak.

The academic boards at both colleges voted in support of tenure but a joint working party straddling both institutions has included a redundancy clause in draft statutes. The thinking behind this was that the bill needed to give legal entity to the new college would need such a clause to get past the Privy Council. But the issue still has to be decided by the colleges - officially it is still no view.

Dorothy Wedderburn is adamant that the question of the new college's legal status will not hold them up. But she recognizes that there may be problems of morale for staff, if there are lectures at the new institution all on different contracts.

### The prospects of academic gain

At Holloway the people and the pace is more relaxed. Dr Miller said: "There is no question of trying to force something through which is against the wishes of the majority of people in the colleges."

"There are a series of stumbling blocks round which you have to find your way. If the principle of tenure is accepted in the colleges then you have a problem with the Privy Council. If you have something which the colleges do not agree with, then you are in earlier trouble."

"We cannot dissipate our energies in this area at the present time to the detriment of practicalities. We have a partnership agreement which is sufficient to come over which is a model. All that can be achieved without an Act."

But if the tenure battle is fought out at Holloway, the Association of University Teachers has two of its most able protagonists. At Bedford there is Dr William Stephenson, new president



Electron microscopy unit under construction at Egham.

of the national association, though it will soon be moving to University College.

At Holloway there is the formidable Dr Geoffrey Alderman, who has just taken over as chair of the London All-Party Group. He is well respected in the college and speech he made to the London University senate on the academic plan was described by Randolph Quirk as "quite brilliant".

He says that Holloway staff has been influenced by two arguments: the Egham college is the only multi-faculty institution where tenure is broken they will not attract good staff of high calibre, and they will be a solution in any further round of cuts.

"I made it clear to RHCAUT that we take a firm stand on tenure as we might be delaying the merger. The University or court or the University Grants Committee could say that unless a Bill was passed there will be no more."

"The feeling overall was that certainly this was a risk but that the greater risk that we will become only a fraction of the fifth site. Tenure will be a very important issue," he said.

But meanwhile the removal of women and men carry on. Last year and the Bedford staff have been packing their things and moving to Egham. By next year only social policy and social science, psychology, geography and geology will still remain at Bedford, because as yet there are no buildings for them at Egham.

Last September Peat Marwick, Mitchell and Co. prepared a £1.5m appraisal for the merger. This is a Treasury requirement for capital investment in the public sector. Using this as a base the colleges examined what their capital requirements would be, their running costs, and what savings they hoped to make.

A crucial element was the decision to reduce numbers of academic staff to reach a ratio 1:12 in arts and 1:10 in science. Final figures for academic staff may change, and the position is complicated because of accretions from other colleges. But in March the UGC was told that in 1981/82 the two colleges had a combined academic staff of 265. By 1984/85 that figure should be 200. Both colleges expect to get there without imposed reductions.

The colleges estimate that they need some £16 million worth of new buildings, including a new library, new buildings for earth sciences, life sciences, mathematics, additional lecture theatre, new students union.

The principal source of this capital will be the sale of Bedford College property, but the UGC may need to provide the cash flow, or even guarantee grant if the Bedford sale is less, or brings in less than expected.

The colleges estimate that after allowing for planned maintenance there will be an annual saving of £790,000 on premises expenditure, a direct consequence of the merger. This is a saving of over 30 per cent.

In addition there will be a saving of £240,000 on academic salaries, assuming the new staff-student ratio. But they told the UGC, "savings of this order of magnitude may only be achievable by merging the two institutions. Without a merger they would damage irreparably the quality of teaching and research."

A further £320,000 worth of savings will be found in other shared facilities and a merged administration.

There may have been reluctance there may still be battles to be won or lost, but the Royal Holloway and Bedford Colleges (and let us hope they think of a better title than that) is very much the "new" university of the 1980s.

# Putting flesh on the bare bones of history

## PROFILE

Peter Scott discusses the distinguished career of historian Professor Lawrence Stone

In an essay in *Daedalus* in 1971 Professor Lawrence Stone, the Wadham historian who migrated to Princeton 20 years ago, compared Sir Lewis Namier's preoccupation with chains of family and client interest in eighteenth century politics to similar preoccupations in novels like Marcel Proust's *Remembrance of Time Past* and Anthony Powell's *Music of Times*.

Such a comparison, he insisted, was not far-fetched. So it may be permissible to suggest that Stone's own intellectual biography to similar excavation - although any hint of nostalgia, even narcissistic, ennui that a comparison with Proust and Powell might suggest would be wide of the mark and of any association except an antagonistic one with the ghost of Namier wider still.

The intellectual excavation of Lawrence Stone reveals three separate things. First, it exposes the detailed formation of one of the most distinguished historians of the early modern period, the author of two books that are already established as enduring classics of scholarship *The Crisis of the Aristocracy 1558-1641* and *The Family, Sex and Marriage in England 1500-1800* and of a forthcoming book *An Open Elite?* to be published in December which seems likely to follow the same path.

Second, it offers a vivid insight into the growth of the "new history" in particular it illuminates the collective development of that group of historians which coalesced around the journal *Past and Present* in the 1950s and included Keith Thomas, Edward Thompson, Eric Hobsbawm and Christopher Hill, a group that may have made the intellectual running in British historiography but has never quite managed to penetrate the citadels of political power within the discipline.

Third, Stone's shifting preoccupations illustrate the broader intellectual currents that have washed over history and many other disciplines since 1945: the stubborn persistence of Marxism, the spread of Weberian sociology, the rise (and fall?) of Parsonian functionalism in social science, the explosive growth of anthropology's influence.

These intellectual currents in turn reflect the central political and cultural phenomena of the post-war world, the memory of pre-war depression that still cast a shadow over public life in the 1940s and 1950s, the liberation of the third world in the early 1960s, the rise of youth culture and student revolt in the late 1960s, and the inwardness, even selfishness, of the new conservatism of the later 1970s and 1980s.

Lawrence Stone was born in 1919 and educated at Charterhouse where he was deeply influenced by his headmaster Sir Robert Birley. "Bored to death in the classical six," he was introduced to history, and personally taught by Birley.

After a brief cross-Channel interlude at the Sorbonne in the year of Munich he went to Christ Church. Although his undergraduate career was interrupted by the war he was to remain at Oxford for the next quarter of a century. It was in his early Oxford years that he discovered a second individual who was to have a decisive influence over his intellectual development, Professor R. H. Tawney.

From his fascination with Tawney grew his interest in economic history, a conventional enough interest for young British historians in the 1940s. "I

was never a Marxist but I suppose I was deeply influenced by the zeitgeist of Marxism which then still had a power that cannot be properly understood today," Stone recalls.

The influence of Marxism led not only to concentration on economic history, but within this field, to a fascination with the crisis of feudalism and the development of capitalism. Out of this preoccupation grew Stone's first book *An Elizabethan: Sir Horatio Palavicino*, a study of a sixteenth century banker.

Looking back across Stone's career some colleagues find it significant that he approached the potentially dry subject of the growth of capitalism through the vivid medium of an individual participant. They see it as an early sign that Stone was not to be a run-of-the-mill economic historian but instead would become both a distinguished exponent of the literary and individualistic tradition of British historical scholarship and range far and wide through the intellectual universe in his search for historical truth.

But his fascination with Tawney and the early influence of Marxism were more immediately crucial to Stone. These interests first located him as a historian - in the early modern period when modern capitalism was born, where he has remained almost ever since into the eighteenth century and even with his new book into the nineteenth. Then they got him started - by embroiling him near the start of his career in one of the most celebrated controversies in British history, the argument about the rise of the gentry in the sixteenth and early seventeenth centuries.

The heavyweights were Tawney himself, who argued that the gentry were rising, and Hugh Trevor-Roper (now Lord Dacre), who argued the opposite. When Tawney began to fail, his cause in a modified form was taken up by J. H. Hexter. But Stone himself played an important supporting role in the controversy, most conspicuously in a 1960 article in *Past and Present* "Trevor-Roper's General Crisis".

The clean lines of the gentry controversy, so elegantly and vituperatively expressed in the historical journals "great vigour and good deal of malice," Stone recalls, have long since been blunted by the accumulated ambiguity of a hundred monographs. Yet the broader issues it raised have not lost their sharp relevance and its influence was crucial.

Can the early modern period continue to be seen as a time when Tawney's gentry-capitalists rose to power? Or are the social tensions of the period better seen in the context of an anachronistic defence of localism against the encroachment of a centralizing state, as Trevor-Roper implied? Or, as Stone will argue in his forthcoming book, was this the time when a landed elite established itself on the plunder of monasteries and church and was only dispossessed by cheap American grain and Lloyd George budgets between 1870 and 1910 - and whose values are still very much alive?

### The influence of the gentry controversy on the writing of history was immense

These remain fascinating questions - and not only for historians. Yet the influence of the gentry controversy on the writing of history was also immense. It marked a crucial episode in the transition from the old economic history of Tawney still under the shadow of Marxism to the new history of *Past and Present* which looked across the Channel to the *Annales* school of Febvre and Braudel and ranged widely across other disciplines like sociology and anthropology. This perhaps reflected a broader shift in academic life as the monochrome memories of the 1930s and 1940s faded to be replaced by the intellectual optimism and diversity of the 1960s.

In 1963 Stone gave up his fellowship at Wadham and moved to Princeton. He was fed up with Oxford, bored with



So in the 1970s he left the sociologists and cliometricians behind. Anthropology, particularly symbolic anthropology, seemed to him to provide more effective tools to get at the sources of behaviour. This new interest combined with a much older interest in the study of *mentalités* pioneered by French historians to open a new phase in Stone's career.

This produced his second famous book, *The Family, Sex and Marriage*, which along with Keith Thomas' books on magic and animals is perhaps the most typical and celebrated product of the "new" history. It illuminated three new influences on Stone's development in the later 1970s: his personal determination to get beyond sociology and quantification to understand the context of individual behaviour; the new enthusiasm for family and women's history among younger historians; and, perhaps more speculatively, the inwardness and obsession with self that in recent years has succeeded the more public preoccupations of the extrovert sixties.

It would be grossly unfair to suggest that in the 1980s Stone has become his own revisionist, but not perhaps that he has mellowed to the extent that he now acknowledges some of the intellectual force behind the positions taken up his opponents. Looking back over the trajectory of the "new" history he accepts that too often the dimension of crude political and administrative power was neglected and that in the enthusiasm to construct models whether Marxist, Weberian, or Parsonian the individual and particular were forgotten.

### Despite 20 years of happy exile in America, he remains very English

The second gap was perhaps filled during the 1970s first by the growing interest in anthropology and then by the growth of the micro-history of families and small groups. The first remains, perhaps because it still appears hostile territory occupied by the followers of Professor Geoffrey Elton and the heirs of Namier. The publication of Stone's controversial article "The Revival of Narrative" in *Past and Present* in 1979 may have signalled the intention of some "new" historians to invade this territory of their rivals. But it drew a polite dissent from Eric Hobsbawm in the next issue and the invasion has never taken place.

In any case Stone is not about to abandon intellectual positions so strongly established over 30 years. He is a veteran of historical controversy, a battler against the critics of Tawney in his early years and still one of the most powerful critics of the Eltonians whom he accuses of an amoral preoccupation with the State and the neo-Namierists whose view of history as a congeries of selfish interests he fears has begun to contaminate the seventeenth century and its revolutionary struggles of grand principle.

Lawrence Stone remains among the most distinguished of English historians. For despite his 20 years of happy exile in America, he remains very English. Although he has been and still is extraordinarily receptive to the most diverse intellectual influences on the study of history, he remains committed to the idea of history as a moral discipline.

At 63 he remains as productive and creative as ever. Princeton, Canberra, Oxford (welcomed every summer partly as elder statesman, partly as prodigal son), in a restless progress he is still far from the ease of retirement from historical scholarship. *An Open Elite?* will question the easy assumption that in England men of business have always found it easy to penetrate the landed elite and suggest instead that the key to England's progress between seventeenth and nineteenth centuries (and decline in the twentieth?) was the cultural homogeneity of bourgeois and gentry classes, a thesis that will certainly provoke new controversy.

Yet his justification of history remains very simple - and moral. It is that we should not only be able to see the houses, churches, fields of England, but understand how they came to be.

But Stone has always had doubts about such techniques, doubts that have grown with the years. He is concerned about the great expense of such historical research which swallows up scarce resources yet does not always produce commensurately interesting results. Above all he is worried that "you can't count motives, you can't count behaviour."



Amicable is not the first word which springs to mind to describe relations between social scientists and the police. But Strathclyde University's Centre for Police Studies is in the forefront of trying to break down the barriers of mutual distrust.

The centre, which was set up last year, is not sponsored by the police, nor by the Home Office, unlike the new centre at Brunel University. The centre's director, Professor Roy Wilkie of the department of administration, says: "We have a good relationship with the police, but we're very independent, and want to stay like that."

Strathclyde's links with the police began several years ago when members of the administration department became involved in designing and teaching management courses for police, both at force level and at national level at the Scottish Police College.

Staff realized there was a dearth of research into the management of police work, and the centre was formed to help fill a gap in university study.

One preliminary investigation sprang from the teaching itself: 400 sergeants on courses filled in questionnaires on their motivations. The Strathclyde team found that dissatisfaction arose largely because of force policy, poor relationships with supervisors, and lack of information. "All things that something can be done about," Roy Wilkie points out.

One sergeant read in the newspaper that his station was to be closed and that he was to be transferred. Another unfortunate officer was detailed to work on six months' night shift just after his wedding. But the study shows that what gave sergeants most satisfaction was the work itself.

There is still little hard information on the responsibilities and activities of sergeants, however, and researcher Stephen Bennett hopes to work in this area. Sergeants control day-to-day police work, and as Professor Wilkie points out, if they worked for a company such as IBM, their role as "first line supervisors" would be taken extremely seriously.

The centre's stated aims are "to foster co-operative relationships between the police service and the academic research community" and "to promote and disseminate a wider understanding of the problems and dilemmas of policing in an open democratic society".

Some social scientists will undoubtedly raise their eyebrows at this non-confrontational stance and may wonder whether there is a conflict of goals in a research centre also involved.

The PhD... will be a real and very great departure in English education, the greatest revolution in my opinion, of modern times" (Ernest Rutherford 1918).

When the dons at Oxford voted to accept the PhD - renamed the Doctor of Philosophy - in February 1917, the *New York Times* hailed the news under headlines that included "Oxford innovation to draw Americans", "Change for Rhodes Men" and "Action taken to divert stream this Country has sent to Germany".

The PhD was introduced in Britain partly because of pressure from the United States and the Dominions, and partly to meet Britain's increasingly obvious industrial decline after 1850. But it was the First World War, and what, with hindsight, can only be described as fairly direct government intervention in university affairs through the Foreign Secretary, A. J. Balfour. The whole episode incidentally gave birth to the Committee of Vice-Chancellors and Principals.

The problem was that increasing numbers of American students had been heading for Germany where they were able to obtain a PhD qualification. To add to their BA, German higher education had led the world in the nineteenth century following the work of Wilhelm von Humboldt, creator of the University of Berlin in 1810, and pioneer of the ideas of state support for universities, and the school *Gymnasium* which prepared German students better than any other country for university education.

Britain, however, stuck to the Master degree which since medieval times had signalled the satisfactory completion of a student's apprenticeship, gradually becoming a formality as the standard of the Bachelorship rose. The early American colleges had

## Breaking down the barriers

Olga Wojtas reports on a group of researchers who are finding ways to develop cooperative links with the police

in training the police. "We're not anti-policing," says David Bradley, lecturer in administration. "That's like saying you're against medicine or education. But we're not uncritical. We're not tolerating corruption or arrogance, but we appreciate the siege mentality. The police are probably their own strongest critics, but like any organization, they like to keep it private."

The centre's links with the police are academically useful, he adds. Strathclyde researchers have found completely open access, while other academics have often had to carry out their work with no police collaboration.

The police themselves should benefit from these links, David Bradley suggests. "Although in the short term, with a bank robbery or a riot, you need direct professional intervention, in the long term the police are only effective to the extent that people themselves are self-policing."

The problems posed by an uncooperative public are matched by those posed by an uninformed public, he continues. If the public and politicians are to make demands on the police, and indeed to fund them, they must have as good an understanding as possible of the nature of policing.

Dr Karen Kermer, an anthropologist from the United States, who is conducting research through the centre on the work of the Community Involvement Branch, has benefited from Strathclyde's good relations with the police.

Coming from America, she confesses she anticipated some problems in police research, but reports: "I can't stress enough that the police have been incredibly cooperative and forthcoming."

The CIB's mandate is preventative, policing - trying to identify potential



"problem areas", which can mean, for example, discussing with an architect how a building can be made more secure. Dr Kermer is examining the CIB's relationship both within the police force and with voluntary associations, health and education departments, schools and the processing of juvenile cases.

The idea of community policing has achieved prominence following the Soarman report and its noted exponent, Dr John Alderson, former chief constable of Devon and Cornwall, is visiting professor to the centre.

Police community involvement in Scotland predates the Brixton riots of a decade and the centre is keen to highlight that the Scottish experience may not be the same as that south of the border. Dr Kermer comments: "I feel there is a general respect for the police in Scotland, albeit occasionally reluctant, which doesn't seem to be so true in England or the States."

Mr Colin Mair, of the university's department of administration, is keen to research relations between the police and ethnic minorities in inner Glasgow. Glasgow has a higher concentration

of ethnic minorities in the inner city than anywhere else in Britain, including London. There is very little documentation, however, on ethnic minorities in Scotland. Undoubtedly there have not been the disturbances in Glasgow which have occurred in the major English cities.

Colin Mair is concerned that unwarranted generalizations are made about "ethnic minorities" and "the police" as if each were homogeneous throughout Britain - he points out that groups in Glasgow are almost all Asian and Oriental, with virtually no Afro-Caribbean, unlike the situation in many cities south of the border.

Neil Walker, a researcher, is examining another area where Scotland has taken the lead, albeit a more controversial one than community policing. The Criminal Justice (Scotland) Act passed three years ago, which altered the law on police investigations, is widely considered to have been effectively a pilot study for similar legislation proposed for England and Wales.

One highly contentious section allows police to detain people for six

hours without charge; previously suspects could not be detained for more than three hours. Although police refused to ask suspects to accompany them to the station, the people wanted to be apprehended were willing to know this was purely voluntary, refuse.

But in the first three months after the Act was passed, more than 100 people detained under the new law did not come to trial. "That means an opportunity for people to vindicate their rights and no opportunity for the judiciary to monitor how police powers are carried out. The more people they might be, the less likely they are to be subject to monitoring," says Neil Walker.

There is a dichotomy between the kind of legislation which Mr Walker feels has not been recognized in the political sphere. "One presumes a change in the situation where there is going to be conflict between the police and public, the other presumes some sort of consensus."

Backed by a Social Science Research Council grant, Mr Walker is conducting a three-year study on the consequences of the law for police management. "The front line work takes place in a situation where control of individual decisions is very tenuous, and must be retrospective. It's a fallacy to talk about control from the top, and load more legal provisions on to the level just increases the lack of control."

There is a great deal of scepticism about whether the police can be managed at all, says David Bradley. "Question this. People are accused, people are trained, it's decided where they should go. In other words there's a lot of hidden control going on but it has been a neglected area."

Elaine Ormiston is researching the effect of technology on police management. This again is a sensitive issue with some people convinced that technology is vital for police work, while others see it as a threat to civil liberties.

Ms Ormiston is currently examining the use of computers, which is standardized within the Scottish forces. Her initial research showed that training can often be inadequate because of lack of resources and that many officers are irritated by having to use computers.

Staff admit there could be a dilemma if research conclusions were potentially damaging to the police, but believe that guarantees of anonymity and a police right of reply are enough to maintain cooperation.

students to be channelled into All universities away from Germany. A British mission to the US under the four was told the importance of the student question. He consulted the Board of Education, now under H.A. Fisher, and in March 1918 he called a universities conference. He opposed proceedings recognizing how Japan university were of governmental interference.

The conference did pass a resolution about the need to make attendance more attractive to students from the US and Allied countries, and this was confirmed by the 18 universities for the next day with support for the PhD. The universities also set up a standing committee to discuss matters of common interest and so the CVCC was born. London, the last to join against the PhD finally succumbed in May 1919.

Questions of supervision, assessment, standards became regular topics at conferences in the 1920s and 1930s. The early fear about lowering standards of existing advanced work never materialized. But more interesting was the fact that it was British not foreign students who flocked to take the PhD.

No overall statistics are available. But at Oxford from 1920 to 1946, 279 of the 338 PhD students were British, 80 were from the US, and 113 from the Dominions. At Cambridge 757 out of 1,104 at the same time were British with 60 from the US, and 204 from the Dominions. By the mid-1970s the proportion of foreign graduates was 30 per cent of the total, reaching 37 per cent by 1979. But with the introduction of new overseas student fees, the proportion has fallen back to around 31 per cent.

How the PhD came to Britain by Ronald Shiner, 29, 75 from the Society for the Study of Higher Education, at Surrey University, Guildford, Surrey, GU4 5XH.

## Public concern vs. private benefit

David Heald analyses the crisis of the welfare state in the face of privatization of the public sector

The image of large public sectors is now sorely tarnished. Charges of bureaucracy, centralization, corporatism, inefficiency, paternalism and oppression are vigorously levelled against them. Although some of the attacks verge on polemical abuse, they have contributed towards the decisive shift in the climate of opinion towards the public sector. Significantly, the mud has stuck even when it only has been mud.

But large public sectors did not arise by accident. They reflected the triumph of the ideology of the Keynesian social democratic state, a commitment to full employment, a willingness to use industrial intervention, and support for the public services characteristic of a welfare state.

Its adherents were not a well-defined or necessarily coherent group, for bitter controversies raged between them, for example, over the extent of public ownership. Many, if not most, would have rejected the label "social democrat". What they shared, however, was a conviction that beneficial state action was possible in the economic and social sphere. This distanced them sharply from both contemporary and later advocates of the minimal state. It was a consensus which embraced Harold Macmillan just as surely as Aneurin Bevan.

Perhaps the most significant achievement of the Keynesian revolution in macroeconomic thought was that, for a time, it banished the notion that mass unemployment was just an inevitable feature, a mark on the landscape, of economic and social life. It was no longer seen as God-given; enlightened policy could dramatically reduce its extent. The view that it was remediable, rather than a permanent feature of the market economy, also encouraged a more humanitarian outlook towards the unemployed. The less unemployment was interpreted as a badge of individual failure to conform to the signals of the market place, more attention could be directed towards the needs of the unemployed as less emphasis was being placed upon the social discipline of unemployment.

This was one of the crucial links which made Keynesian macroeconomic policy fit neatly alongside the Beveridge reforms. It was a programme with wide appeal. Keynesian ideas facilitated the survival of a predominantly privately owned market-oriented economy, albeit with a much enlarged non-market sector. Smoothing out the cycles of boom and depression was seen by many as a method when they argued that there were manifestations of the inherent self-destructiveness of capitalism.

The appeal of the Keynesian social democratic state to socialists rested not only in the prospect of banishing the spectre of mass unemployment but in the much more relaxed attitude this new stabilization role for the public sector generated towards its size. The tax and expenditure powers of the state would be used to mediate the economic and social inequality induced by the distribution of property and ability, the class system and the market economy. But Labour governments faced a paradox: the scope for social programmes and for improved living standards depended upon the economic performance of the very private capitalists to which the Labour movement had grown up in mutual antagonism.

Regardless of whether it could justifiably claim credit or not, the Keynesian social democratic state received powerful reinforcement from the post-1945 prosperity, with steady economic growth accompanied by full employment. But it was inevitable that those who had earlier claimed credit for perceived success would later be tarred with blame for perceived failure. Frustrated expectations, especially after the social lubricant of growth dried up, generated a bitter mood, with too much government, too powerful trade unions, too many scroungers and too many immigrants often being canvassed as explanations for economic decline.

But the fundamental change in intellectual opinion, especially the counter-revolution in the economics profession, is perhaps even more dramatic a development than the shifts in the political arena. It used to be claimed that the brightest minds were sympathetic to the programmes of the Keynesian social democratic state, echoing Schumpeter's view that intellectuals were naturally hostile to capitalism. The reverse could now be argued, at least about the economics profession: not so much in terms of numbers as of commitment, vigour and self-confidence. To a remarkable extent, monetarist and free-market economists have been setting the intellectual and political agenda.

Indeed, the heirs of Keynes and Tawney are strangely silent, their self-confidence apparently shattered. Inhibited by self-doubt, they froze when faced by confident assertions that there are simple answers. To reply that economic and social changes have made problems much more complex and difficult to resolve might be true. But it sounds lame, hardly ground on which to stem either revolutions or crusades.

In the 1970s, Keynesian policies were seen to have "failed", leaving open terrain for monetarists to occupy. That failure was social and political, rather than economic and technical, originating in the labour market. The commitment to full employment and to a large public sector was made without sufficient attention being paid to the subsequent implications for the nature and role of the state.

Such unresolved dilemmas helped to explain the success of monetarists, such as Milton Friedman, in securing acceptance of their ideas and policies in governmental and financial circles. Strict control of the money supply was an easily understood proposal. The monetarist counter-revolution knocked away one of the intellectual pillars underpinning the large public sectors characteristic of the Keynesian social democratic state.

Whatever the logical links, the monetarist and free-market perspectives fit neatly together. When the invisible hand works smoothly, the monetarist diagnosis and prescription is reinforced, thereby generating powerful arguments against both discretionary demand management and an "over-generous" tax/transfer system. Furthermore, the blame for high "voluntary" unemployment during any adjustment process is attributed not to failings of the market economy but to the operation of collective institutions, be they trade unions (for example resistance to real wage cuts) or the state (for example high unemployment benefits, and subsidized public sector housing inhibiting labour mobility).

The prescribed policy is therefore to free the market by curtailing the activities of the state and the operation of trade unions.

Traditionally the Conservative party has not taken ideology too seriously, a trait which enabled it to accept the verdict of 1945 and set out to prove that it could run the Keynesian social democratic state much better than Labour. But the radicalization of the Conservative party under Mrs Thatcher has seen it enthusiastically adopt monetarism and embrace the free market. As part of the rolling back of the state in favour of the market, many of the underlying premises of the Keynesian social democratic state have been challenged. That is why there is a crisis about the future of the welfare state.

Not only has the post-war commitment to full employment been abandoned. Just as in the 1930s, it is again the private sector which is being urged to take the lead in providing public services, and there is now vigorous advocacy of charges playing a much more significant role.

Privatization of the production of a service which continues to be financed by the public sector: the respective role of taxes and charges for public services is, of course, an age old issue but there is now vigorous advocacy of charges playing a much more significant role.

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respectable for economists to discuss the therapeutic qualities of unemployment. The political victory of Mrs Thatcher, over her opponents within the Conservative party just as much as those outside, has provided a receptive audience for such views.

It is much easier to assume the problem away or to blame someone else than to solve it. Patrick Minford is the most prominent academic exponent of the view that unemployment is voluntary, not involuntary, with his writing containing frequent references to individuals choosing whether to work or to take leisure and benefits. Unemployment is said to be caused by governments and unions, with the prescription being privatization, lower benefits and state action against unions.

The clear-cut remedies of monetary discipline and less government have become immensely fashionable, encouraged by the political success of a Prime Minister who likes to think in terms of running the economy like a family budget, relies the "right to be unequal" and warns to anything that can be called privatization. But to emphasize this fact is not to deny that there were aspects of the Keynesian social democratic orthodoxy which had made it vulnerable.

Becoming the prevailing orthodoxy has stultified its development and a rather comfortable complacency had made it possible for awkward questions never to be asked. Such an absence of constructive criticism from within its own ranks had left it ill-prepared to respond to a hostile but sophisticated critique. Keynesian policy proposals were popularized using a one-sector model which entirely neglected the role of money. Sophisticates knew better but allowed this practice to continue. Furthermore, much of the analysis supporting the programmes of the welfare state was careless.

These deficiencies led the foundations of policy curiously exposed to

Privatization - the four components

● Privatization of the financing of a service which continues to be produced by the public sector: the respective role of taxes and charges for public services is, of course, an age old issue but there is now vigorous advocacy of charges playing a much more significant role.

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probing by those critics with a good grasp of economic analysis and little sympathy for programme objectives. The Keynesian social democratic state therefore suffered at the hands of critics who turned against it the weapons of commitment and analysis, backed up by wider political support, through which it had itself triumphed. But to concede the contemporary pre-eminence of free-market and monetarist economics is not to acknowledge their validity.

Coupled with the new willingness on the political right to embrace market solutions, the budgetary straps on the Exchequer has become ever more acute. The potent combination of demography and recession has encouraged the view that the existing level of expenditure commitments will be unsustainable in the future. The in-built dynamic of public expenditure programmes and the growing difficulties of financing them have stimulated the search for alternative policies which would relieve this budgetary stress. Whereas this crisis would confront governments of any political persuasion, it is seen as an opportunity by a government converted to the ideology of free-market capitalism and hostile to the economic and social role of the state.

"Privatization" is a new word, scarcely heard before 1979, which has quickly gained popular currency as an umbrella term for very many different policies, loosely linked by the way in which they are taken to mean a strengthening of the market at the expense of the state. Given the diverse questions so described the potential benefits and costs accruing from privatization must be specified and then evaluated carefully. It is a measure of the quality of the policy debate that so much of it is conducted in the terms of "private good, public bad: so privatize" or of its converse.

Although deep ideological significance is assigned to the precise line drawn between the public and private sectors, any careful analysis quickly cautions that attitudes which can be summed up as "privatization good" or "privatization bad" miss many of the most important and practical issues which have to be resolved. Within the broad framework provided by a political and economic judgment about the respective roles of the market and the state, detailed decisions have to be taken about the appropriate policy instruments in highly diverse sectors. Otherwise, policies of privatization or publicization are likely to be pursued

with great vigour but little insight. Privatization has in part been thrust to the front of the political agenda by past deficiencies in the way the public sector has been managed. The public sector, and hence the welfare state, is now suffering an unprecedented crisis of consent. Running the public sector badly is an excellent way of alienating support for its underlying objectives. But the threatening implications of having the public sector run by governments hostile to its existence are becoming increasingly apparent. The complex tasks of ensuring efficiency and accountability in the public sector are not assisted by rhetoric about "getting the state off the backs of the people" - even more so when such concerns are exceedingly selective.

For example, the disposal of public sector assets on almost any terms in order to reduce public expenditure and to reduce the contribution to the PSBR is a strange contribution to economic efficiency. It is always possible to sell profitable and successful enterprises, such as Briolet and British Gas, or shares in British Petroleum, in order to raise cash but this is partly done from the view that there should not be any successes in the public sector. Such policies are damaging, not least by leaving the public sector in an extremely unbalanced form, with "unsellable" and "unsuitable" activities prominent.

The most important test case for the future of the public sector will be the National Health Service. Here, it will be seen how far the Government's hostility to the nationalized sector spreads to the core welfare state. Developments are occurring on several fronts. The last Parliament saw dramatic increases in the level of prescription charges without much regard to whether these might cause other NHS resources to be wasted or to the extraordinary fact that three-quarters of prescriptions are now dispensed without the patient facing the per item charge. Contracting out of ancillary services is being pushed through despite considerable opposition from health authorities, with a stimulus to this policy being provided by the 1982 NHS industrial disputes. There will be more encouragement to private health insurance with the vagaries of the Government's accounting system (which counts public expenditure against the NHS but does not count tax expenditures on allowances against income tax), encouraging the conventional belief that this is a costless policy. What is fundamentally at stake are the implications for the future resourcing and quality of the NHS as an increasing number of the more affluent and articulate members of the community no longer depend on it.

It is yet another measure of the public sector's loss of consent that privatization as a slogan has acquired such currency and that resistance to it has been sporadic and ineffective. In the Government's rhetoric, privatization is depicted as the route to increased efficiency and the way of making "the public sector for the public". Once the central message is accepted, privatization has few logical bounds: not only where performance is judged to be satisfactory but also to prevent now satisfactory performance deteriorating in future through the manifold alleged deficiencies of the public sector. In logic, the Falklands task force ought to have been contracted out - perhaps the Falklands themselves might be sold to the highest bidder!

When privatization is advocated in such a way, few of the real complexities concerning the concept and measurement of efficiency in public sector activities are even contemplated, let alone resolved. Nor is much attention paid to the concerns about equality and access which brought many activities into the public sector. Once market solutions secured a place on the political agenda it was perhaps not surprising that the qualifications which the more careful members of the economics profession attach to their advocacy of the market were completely forgotten. It is time to reject the view that anything the public sector can do the private sector can do better. But it is also time to worry more about the management of the public sector and to devote much more attention to securing better directed public spending, for there will be severe limits on spending more.

The author teaches in Glasgow University's department of management studies. His Public Expenditure: Its Defence and Reform is published today by Martin Robinson.



## Same ingredients different package?

Ian Glover and Ruth Schröck take a look at social science and the politics of language

Over the last year or two Sir Keith Joseph and other ministers have suggested that the word "science" in the title of the Social Science Research Council should be replaced by "studies". It would seem that these pressures are behind the recent decision of the SSRC to become the Economic and Social Research Council. This has prompted us to make two main observations.

Our first is that the whole English language debate about the extent to which particular disciplines are "scientific" or otherwise, about whether they are "sciences" or "arts" and so on, looks frivolous and indeed quaint and semi-literate when the linguistic conventions and ways of classifying subjects for study of other Europeans, such as Germans, are examined.

The German way, accepted virtually everywhere in Europe apart from the British Isles, has long adopted a three-fold classification, as opposed to our two-fold one. Its first group of subjects comes under the heading of *Kunst*. They consist of the fine and performing arts, such as painting, drama, music and the various forms of creative writing. They are taught and studied in special conservatoires and their outputs are judged by aesthetic criteria.

The second group includes most of the subjects studied and taught in the British universities, and they are classified as part of *Wissenschaft* (literally "knowledge"). *Wissenschaft* includes all sciences - natural and social and most of our so-called "humanities" or "arts" subjects such as history, the classics, and literary and artistic criticism. On the Continent it belongs in the traditional universities, as at Heidelberg, the Sorbonne, or Uppsala in Sweden. Students and teachers represent the worldly philosophers and their outputs are judged by the criterion of truth. A simple way of illustrating the distinction between *Wissenschaft* and *Kunst* is to point out that whereas the former includes the production of histories of art, the latter produces works of art. Thus *Kunst* is for some of the world's makers and doers, rather than for those whose role is to study things.

The third and final group is described by the word *Technik*. In English, it has been portrayed as being most accurately understood as being "like our 'Technique' with a capital 'T' and a 'knight'hood". Most simply, *Technik* refers to engineering and other "making and doing" skills apart from *Kunst* ones. In countries like West Germany, Sweden, the Netherlands and France it is taught and studied in prestigious technical universities (university-level engineering schools in France) separate from the traditional ones. Most of their teachers have been experienced and successful practitioners in industry, and graduates have received an education which is both broader and more practical than that received by the vast majority of British graduates of all types. Moreover and much more so than in the case in Britain, the outputs are aimed at particular sectors of manufacturing. The criteria by which these outputs are judged are ones of utility. (Does it work? Is it useful? Will it sell?)

It is worth emphasizing that *Technik*, which attracts students who are at least as able as those who make other choices, does not easily translate into the English term "technology". It places more emphasis on useful personal skill, and lacks the English word's unscientifically varied connotations of social status, large scale, inhumanity, and direct inputs from natural science. Its meaning is precise: unlike technology, it does not mean hardware, or ideas, or something that arts graduates love to hate, according to who is doing the talking.

Under the above scheme all those engaged in the systematic pursuit of verifiable knowledge of phenomena, ie, truth, of any kind are scientists. The French, the Russians, and most other Europeans use it, and even the Americans go a long way along its road when they categorize social scientists as part of "scientific and technological manpower". The scheme is far clearer

in its distinctions between the world's makers and doers and its thinkers than is the confused English-language distinction between art and science. It does not mistakenly and ideologically depict engineering as a mere sub-category of natural science in the face of an overwhelming body of evidence to the effect that engineering/Technik is much more art than science. Further its breadth implicitly and sensibly opposes the naive idea that there is such a thing as an exact science.

Political attempts to denigrate the social sciences generally neglect the fact that while they may not produce "hard" data as often as the natural sciences, they are usually "harder" in the sense of dealing with more complex phenomena, which are wilfully elusive and wilfully unique. There is of course bad and good social science just as there is bad and good natural science. Further, although attempts to produce firm predictions about human behaviour using social scientific or any other evidence are nonsensical in both theory and practice, we most certainly can talk of possibilities, limits and trends. Although tentative in principle, such talk clearly has to have practical relevance. Moreover those of us who have worked on social surveys know how in practice almost frighteningly predictable the attitudes let alone the backgrounds, of respondents can sometimes seem once a substantial part of the data has been processed.

### Language is the most basic of all social institutions

Our second main observation is concerned with some of those who might be expected to defend social science against its outsider critics. Some sociologists and others have expressed a rather effete feeling that labels are unimportant, although in other settings some of the same people would probably support the contradictory view that language is the most basic of all social institutions. Labels do matter very much in this and many other cases, for at least three reasons. First, and most pragmatically for those directly involved, there is a slippery slope from social or "behavioural" science to social/behavioural "studies", to liberal or complementary or communications studies, to basic studies (how to use libraries and write reports), to the dole.

Second, social scientific data are usually both expensive to obtain and they are at least potentially useful, and to give away weakly to those who would effectively deny that they have much value is irresponsible. Economics, history, and sociology have produced the vast bulk of the potentially "relevant" explanations of Britain's decline and its related problems; the ideas and methods of social science are the only ones which demographic, marketing, and psychophysical and all other forms of research about human actions can draw on. The natural sciences are not equipped to produce such data, and attempts to apply naively idealized and other variants of their methods and forms of explanation to social phenomena normally produce descriptions which are one-sided, reductionist, or both.

Third, precise definitions and descriptions do matter, and not only on the "short-term" utilitarian kinds of ground noted as the first reason. They matter because truth matters, as educationists and politicians concerned with education should be particularly aware. Indeed the fact that it is a concern with precision which motivates the right of social science to be classified with natural science, as science should be, is the main weapon for standing Sir Keith's political sophistries on their heads.

The authors are respectively lecturer in sociology and senior lecturer in nursing studies at Dundee College of Technology.

## Just for the record . . .

John Field asks why Government departments have failed to heed the White Paper on public records

Some months ago, I tried to discover how government departments were responding to the recommendations in the Government's White Paper on modern public records. It seemed particularly important to know whether departments were drawing up lists of specialists whom they would consult with from time to time on their records policy; and what progress had been made in reviewing the procedure whereby the Lord Chancellor allows departments to withhold records relating to security matters for more than 30 years.

Not many departments felt able to reply to my questions, but those that did, including the Lord Chancellor's department, told me politely that the Select Committee on Education, Science and Arts was investigating these matters. In due course it would issue a report, and the public could expect to read of its findings.

There will now be no report on public records, at least from this particular committee. Christopher Price, who chaired it, and is well-known to *THESE* readers, lost his Lewisham West seat on June 9; but not before the committee was able to accumulate considerable evidence on the way the public records system operates. What has been published are the minutes of the evidence taken before the committee, and they offer a fascinating, if often unintended, set of insights into the workings of modern government departments.

Historians, though, will find much in the minutes to trouble them. The recommendations of the white paper seem to have had remarkably little impact upon departmental procedures; indeed, some major departments have little sympathy for a more open and imaginative approach to records-keeping; most remarkably of all, it would appear that the Public Records Office, for whatever reason, is unable to exercise the degree of leadership required if public records policy is to follow a reasonably consistent and effective pattern.

The white paper, regarded by many historians as excessively cautious on the issue of open government, rejected all but the most modest proposals of the Wilson Committee on public records. Wilson itself was not noted for radicalism; the underlying assumption was that the so-called Grigg system, initiated in 1954, was fine in principle and simply needed to be operated properly in those departments that had deviated from Grigg.

The Wilson recommendations tried primarily either to make the Grigg system work more effectively (for example, through the establishment of "sector panels" of historians to advise departments what type of documents might be preserved) or to bring it up to date (as with the suggestion that many documents, including those series of files known as "particular instance papers", should be sampled and stored mechanically).

Historians generally expressed disappointment that the Wilson proposals were jettisoned so cursorily, but scholars interested in long-term series of health service data had special reason for annoyance. The white paper, it should be entirely removed from the protection of the Public Records Acts, as their bulk and confidentiality made storage and research problematic.

Among the protests received by the select committee was a long and detailed memorandum from Dr. Charles Webster, director of the Wellcome Unit for the history of medicine at Oxford, which argued that study of long series of clinical records was helpful in bringing social science research into a clearer relationship with "historical epidemiology" and social medicine.

The white paper was thus no modest satisfaction in it. So why do many government departments seem to be ignoring it? The proposal to maintain lists of historians willing to be con-



The Public Records Office at Kew: not providing enough leadership

sulted on questions of selection, on an ad hoc basis, is said by the Lord Chancellor's department not to have been implemented at all.

As for the promise to reconsider the "blanket approvals" given by the Lord Chancellor to permit security-related records to be closed for over 30 years, it does not seem that there was much on offer in the first place. Early hopes that M15 files might at last start to enter the PRO have now faded. According to Sir Robert Armstrong, the present categories of "security and intelligence-related records over 30 years old" were allowed extended periods of closure in 1967; that approval will not be reviewed until 1992.

It is most unlikely that the Prime Minister will agree to create any new categories of security records before 1992. In at least one respect, the situation has worsened over recent years. Foreign Office papers currently included in the Lloyd George archives in the House of Lords were, said Sir Robert, "of a kind which a minister would not now be permitted to retain on leaving office".

The evidence before the select committee reminds us that government departments in Britain, in record-keeping as in other matters, are remarkably free from outside scrutiny. The considered verdict of Lord Denning, who as Master of the Rolls Records for 20 years, was that "we were just almost a consumer council". The Advisory Council "would really not know what was being kept closed and for what there was an access of 100 years or 150".

Some things that departments do not want to show seem to have little in them to justify continued secrecy. The committee heard, for instance, about the journal of the first head of the Secret Intelligence Service, one Captain Sir Mansfield Cumming, which covered the years between 1909 and 1923; this remains closed to historians and others as some of the detail concerns operational matters, such as the disguises used by the good captain in the course of his business.

More often, though, carelessness or plain ignorance of specialists' needs are to blame. The Department of Health and Social Security, before it was chaired by Professor David Donison, used to keep a mere 200 files every 10th year after they had ended their immediately useful life. But in a moral sense carelessness, ignorance or silliness simply do not compare in seriousness with those instances where government departments have deliberately destroyed or withheld files in an attempt to rewrite the past.

One example may well be the way the wartime records of the Special Operations Executive were "misfolded" (Sir Duncan Wilson's charitable description) later on. These records cover details of joint operations with partisans in countries - like Yugoslavia and Bulgaria - whose relations with Britain later became sensitive on political, not security grounds. Researchers into Britain's possession of nuclear weapons have also complained persistently, with much justification, that

documents have been withheld on purely political grounds.

These abuses would be easier to stomach if there were any indications that government departments had turned their heads firmly against them in future. But once more the select committee's hearings do not inspire confidence. In particular, it is apparent that the career structure for departmental records officers is unduly restricting, and their standing in departments is low.

Lord Denning was characteristically to the point: it is "a dead-end job". The Civil and Public Servants' Association claimed that many departments view their records sections as "heaven to the sick and incapable". Senior civil servants do not normally offer staff support and encouragement to the job to be taken seriously, indeed suggest that some MPs do not care greatly about modern public records.

The committee itself - or, to be accurate, its active members - seems to have sat in an atmosphere where apathy combined with mandarin resistance. The most glittering witness called before the committee - including Sir Robert Armstrong and the Right Honourable Francis Pym - was a letters of refusal, preferring to play the part of Gandhi and offer passive resistance to the committee's investigation.

What may cause even greater concern to historians is the apparent failure of the PRO to fight its corner. The PRO does not exercise the firm leadership guidance required of it under the 1957 Act, which supposedly ensures that it shall "co-ordinate" the public records policies of different departments.

Lord Trend, in his evidence, ascribed its failure to a "comparative diffidence on the part of the PRO" and preoccupation in the part of the department with matters "of the inferiority complex is not surprising given the way it has been shaped out for disproportionately damaging cuts from 466 in March 1980, its workforce had fallen to 406 by April 1982, at a time of steady expansion in public records service.

Yet its failings are not simply due to material weakness. Professor Margaret Gowing, herself a one-time select committee member, told the PRO that little attention to the problem of arising out of departmental reorganisation, and completely failed to use statutory powers to "ensure relevant departments with bad records of terms".

This suggests a deeper lack of confidence. And what can one make of Professor Martin's suggestion, regarding destruction of records, that "there is something to be said for systematically (the element of chance) in these matters"?

Education, Science and Arts Committee: Public Records: Minutes of Evidence (House of Commons paper 110) HMSO £9.15p

The author is lecturer in economic history at Northern College, Burnley

### General description

Part-timers are an instantly recognizable breed, resembling snails, in that they carry their security with them. Part-timers can be seen, staggering on and off public transport, under the weight of their teaching materials, fearful lest, in the absence of suitable storage space, keys, and faith in their colleagues, a vital element of their teaching programme will go missing, and render them ineffectual.

A part-timer is a person, who, facing the unpaid desert waste of a long summer holiday, after suffering all the academic year long, jibes about grossly inflated hourly salaries, tries to spread nine months salary over 12. On finding that it won't be spread so thinly, trots meekly to the dole office and is told to go away as he/she is a "seasonal worker".

Part-timers have the thrill of the unexpected in their lives. Notice to the employer can be given very quickly, and no one really takes the terms contract very seriously. Of course, the situation also works in reverse.

A part-timer is nifty with a pocket calculator and a dab hand at form filling. Who wouldn't be, given the tedium and complexity of salary claims?

A part-timer is a shrewd budgeter and an accomplished groveller. When the four-weekly salary claim becomes five and a half weeks counting submission lag, six and a half weeks counting getting lost in the labyrinth of County Hall and re-starting the whole affair, and finally disappearing into the bowels of the computer, never to be seen again; then the family has to be weaned on to vegetarian nut roast without the nuts, the bank manager placated, the gas, electricity and phone moguls courted with assurances of honest intent.

Experienced part-timers know that they can get part-time work by applying for full-time jobs. They aren't daft enough to think they will get the full-time job - that goes to a sitting tenant. But if the part-timer gives a good interview, there may be a consolation prize in the offer of a few hours' teaching.

Transatlantic vacations are no longer miracles, but spare a thought for our forebears for whom they were a one-way ticket.

On my first cultural pilgrimage to the United States some years previously, I had visited diverse places: Harlem, Dreiser's Chicago, Sinclair Lewis's Streets of the Mid-West and, above all, Jack London's favourite saloon on the waterfront at Oakland. Perhaps I was deluding myself and didn't see it at all; it was certainly not what Jack London saw.

I also saw Poe's cottage at Richmond, Virginia, where he lived with his child-bride in 1837 - "Two dollars the poems and don't touch the bed-linen" as the lady curator cried. Nothing much to do with the tragic genius of Edgar Allan Poe, who died in an alcoholic stupor at Baltimore, far to the north, in 1849. But it created a vision of his strange existence in this tobacco-fragrant Southern city when in 1835, after leaving West Point, he edited *The Southern Literary Messenger*.

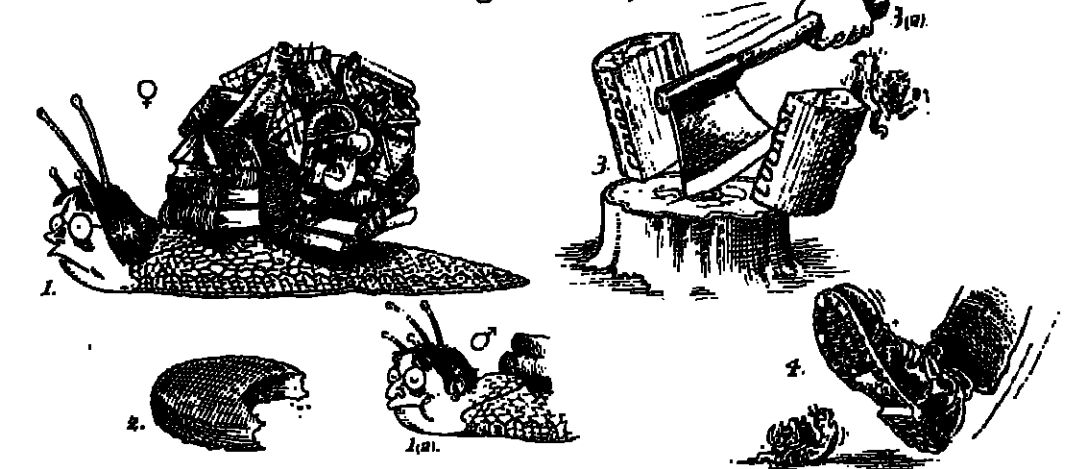
On my second pilgrimage, on the advice of a friend, I resolved to go in search of Scott and Zelda Fitzgerald. William Faulkner, O. Henry, and the civil war - in which many north and south Irishmen died on both the Federal and Confederate sides.

Everything in America is geared to the traveller's convenience. At the arrivals gate of an airport, along with car rentals and other services, there is a battery of freephones for the weary traveller to call motels at any hour of day or night. I liked the excitement of American motels, whether airport or downtown - Holiday Inn, Ramada, Marriott Motor Inn, Hyatt Regency - each one tailored to the size and cut of your credit card, with much socializing and business, political and commercial conferences, so you are always in danger of being roped in for the time of your life.

Another feature was the number of religious crusades and revivalist missions taking place; the gospel singers very young and vibrant with cleanliness inside and out. And then there was the ageing GI bride, 40 years on and longing to see Donaghadee.

Your friendly bell-captain is the guy who arranges all the bus-trips and

Fig 27 Common part timer (*Systemsgoril inferus*)



1 and 1(a): Adult specimens. Note characteristic prostrate attitude. 2: Feeds mainly on the useless culet. NATURAL ENEMIES. It is in constant danger from the mad axemen of education (3a). It also lives in fear of almost everyone else in education (4). CALLS: "Gizajob" and "Yulidoinit".

## How to spot a hardy species

Ruth Ward compiles some field notes on the natural habitat and typical characteristics of the part-timer

### Good points

Part-timers are versatile! There is no end to the ways they can plug while nervous breakdowns and babies are had, handwagons are started, and experiments tried.

Part-timers are reliable! Not for them the luxury of soaring temperatures in bed, cars that won't start and buses that break down. Pay depends on presence; so part-timers can always be relied upon to hold the fort, scattering germs like confetti, while waiting for their full-time counterparts to emerge from the hairdressers in their extended lunch hour, collect their children from

school and service their cars.

A part-timer knows his/her place. Gone are the days when their place question was: "When do I put a pay claim in?" followed by: "How long will it take to come through?"

Mindful of the fact that their full-time bosses will turn contemptuous eyes on them when they hesitantly raise the question of pay after four weeks' unflagging service, knowing that they are expected to work for free and that their money comes out of the personal pocket of their superior, part-timers will work twice as hard as everyone else in an effort to justify

their existence and that feeling of being there on sufferance. The part-timer's feeling of stoicism is won through his/her ability to shrug off the hurtfulness of that most frequently uttered professional phrase: "It's that bloody part-timer's fault."

A part-timer is someone to whom you can safely give a half-baked idea, a shed and a few chairs, and tell them to: "Equip tomorrow's society."

The part-timer attacks his/her work with the cheerfulness and confidence of one who knows he/she will just get going, begin to generate interest in his/her students and then hear that the

## Literary trails down south

Here a Turkish belly-dancer with an accent of the Bronx invited privileged visitors to join her act and I obliged to the raucous approval of the US Navy. She offered me a permanency which alas I couldn't accept due to prior commitments.

Down the coast and into Georgia is Savannah, picture of a port in decay after the fall of King Cotton. Settling itself up as a counter-attraction to Charleston and resenting the slur of being a poor relation, Savannah was founded by an English pioneer town-planner named Oglethorpe. The restoration of its decayed Georgian buildings is in the hands of a local heritage society inspired by genteel, though vigorous, ladies, and its old waterfront has been turned into lively boutiques and restaurants.

It was here that John and Charles Wesley preached their faith before falling foul of the colonists through practising their Christian devotions incessantly and rigidly, with the result that they performed returned prematurely to England. Many of the first colonists were gentlemen rakes, debtors and bankrupts, baddies of all descriptions, settled there on the Savannah river as a protective outpost for Charleston against the raids of the Spaniards and the French.

So the Deep South became deeper, I flew to Montgomery, Alabama, in the company of a judge who was going to arbitrate in a labour dispute between a textile company and its operatives. He had been badly wounded in the Philippines in World War II but retained a joie de vivre which his legal responsibilities hadn't dimmed.

Montgomery was only an hour away from Atlanta by air and another game of mine began - looking up the local directory for namesakes and long-lost cousins or distant collateral who had

vanished from sight, possibly in the civil war . . . Stewart, Walker, Orr, Trimble, Gillespie, Alcorn, Bothwell, Keyes, etc. There were hundreds, but the German connection is strong too, presumably from Hanoverian times.

Montgomery was the Confederate capital during the civil war and is still the historic city of the South. The Confederate Museum and home of the Confederate president, Jefferson Davis, contains all the sad bric-a-brac of letters, uniforms, weapons from the war. Here too is the state legislature and the home of the former state governor, George Wallace, who survived several assassination attempts but eventually died of his cumulative injuries. Political assassinations are a feature of the South . . . Governor Huey Long of Louisiana, John F. Kennedy, and there were others. Oun-lay you call it.

In fact I sensed an overpowering atmosphere of mourning around Montgomery, not least in the house with a red door where Scott Fitzgerald first called on Zelda Sayre, his wife-to-be and collaborator in art when the Jazz Age began. Incidentally, I think that Zelda's novel *Save Me the Waltz*, in its crazy way, has as much genius as Scott's *The Great Gatsby*. But she tried to destroy him; in the end they destroyed each other.

There's no doubt that Scott had a big hand in Zelda's *Save Me the Waltz* and especially so because it was his life and love together. Too poignant for words - for Zelda it was death in the fire at the mental hospital, for Scott as big a slide into drink as Edgar Allan Poe's. One thing I didn't like was the fact that one of the museum staff, a retired businessman, talked a lot about the Fitzgeralds but had obviously never turned a page of their works.

To get to the Sayre home - and I was told the Fitzgerald's daughter Scotty was still living there - I hired a Redlands (or was it Redlight?) taxi, a Pontiac falling apart, and there was in the old beat-up driver what it means to be a poor white . . . "Aw shucks mister, aw don't wanna take no money from you folks; you been so mighty friendly."

After a while, I was offering him a job as a taxi-driver in London, but I'm

idea wasn't a very good one anyway and in any case someone got their sums wrong.

Part-timers are sunny optimists - forever fantasizing about their services being rewarded by the offer of a full-time post. They are competing against education cuts, the axe-men (local edition of the Manpower Services Commission and their strange game of "Now you have a course/Now you don't"), and the arbitrariness of their immediate full-time boss. But hope springs eternal.

### Bad points

Only two have thus far been noted: 1. A tendency to lapse into sullen lethargy. This can be due to exhaustion from their efforts in manning educational outposts like prisons and Borstals and trying to make the word "education" something other than a farcical ritual. It is especially noticeable at yearly conferences during the noble speechifying and exhortations to greater efforts. Careful observation will reveal the part-timer's eyes glazing over, and the silent workings of his/her mouth devoted as the rather negative, truculent comment: "Well you try doing it then!"

2. A part-timer may develop schizoid tendencies. This is an occupational hazard, caused by that ability to earn cash through diversification. Taken to extremes - a morning here with the YOP and YTS trainees, an afternoon there with the Asians, and dreams haunted by the recurring nightmare that the prepared advisory session is given to the sophistries in the maximum security prison.

So, finally, what is a part-timer? Is it a middle-class mum keeping her hand in, a Thatcher reject at 22, a skiving supplementer of dole, a struggling poet, a walking disaster area, educationally speaking? The answer is all of these things and probably worse. More accurately, however, is that in these days of accountability, the recession has swelled the ranks of talented and hard-working part-timers. The "second-class citizen" tag should no longer apply.

Nice work - shame about the status. The author is a part-timer.

idea wasn't a very good one anyway and in any case someone got their sums wrong.

Out of respect I didn't dare to knock on that red door of the Fitzgeralds. After all, for Scotty it would have been another literary intrusion.

I could have gone to the Alabama coast to swim again or could have surveyed the scenes of Faulkner's novels in Mississippi, but I cheated by going straight to New Orleans which has massive industries and extensive docks, and, of course, the French Quarter with all that jazz. In the airport limousine (an elongated taxi) going into town there was a young upper-class guitarist who sold me a personal friend of Princess Margaret and Roddy Llewellyn. There seemed no point in pursuing the matter further.

In *Streetscar Named Desire*, Tennessee Williams creates a haunting picture of his own life - a tender elegy - with the French Quarter as a symbolic background. But nowadays, overwhelmed with tourism, it is vastly changed from the time he, or O. Henry, worked there.

Bourbon Street, a garish scene akin to Montmartre rather than Soho, has Dixieland jazz ringing out all hours from Presentation Hall, where elderly negroes toot-toot-toot on the trumpet all night in competition with fled sea-fod, exotic drinking-dens mainly for sailors and the sleaziest strip-teases you'll see anywhere. I stayed in a duplex at the Ramada Inn on Bourbon and found it ideal for a silver-golden wedding.

I took a moonlight trip along the Mississippi on the Natchez Queen, a floating gambling-hell from old times. When I asked the skipper some foolish question about navigating the channels, he gave me short and salty shrift. "Now see here fella, are you lookin' for trouble?"

Thence to Nashville, home of Country and Western, and Memphis, another great cotton river-port, birthplace of Elvis Presley, and here I heard Hoagy Carmichael's *Memphis in June* exquisitely rendered. Finally there was Chattanooga (inspiration of the *Chattanooga Choo-Choo*) and after that I came home with considerable regrets and put away my tourist-coloured spectacles for another year.

The author is lecturer in communication at City of London Polytechnic.



## BOOKS

## The fruits of evolution

by Richard W. Burkhardt, Jr

**The Growth of Biological Thought: diversity, evolution, and inheritance** by Ernst Mayr  
Harvard University Press, \$30.00  
ISBN 0 674 36445 7

In 1942 Julian Huxley proclaimed through the title and contents of his book, *Evolution: the modern synthesis*, that biologists were reaching a new consensus in their understanding of the evolutionary process. The emerging consensus, briefly stated, involved the fruitful union of the findings of geneticists on the one hand and naturalists on the other, two groups which previously had been at odds with one another in their views of how evolution works.

The general conclusion reached in this "modern synthesis" was that the various phenomena of evolution can be explained as the result of a two-step process: the production of genetic diversity through mutation and recombination in natural populations; and the selection of those small genetic differences to natural selection.

Heralded by Theodosius Dobzhansky's *Genetics and the Origin of Species* (1937), the new synthesis was further developed and consolidated through Huxley's volume of 1942, *Ernst Mayr's Systematics and the Origin of Species* (also 1942), George Gaylord Simpson's *Tempo and Mode in Evolution* (1944), and Bernhard Rensch's *Neue Probleme der Abstammungslehre* (1947). Ernst Mayr in his latest book calls the synthesis "the most decisive event in the history of evolutionary biology since the publication of the *Origin of Species* in 1859."

Professor Mayr's contributions to the evolutionary synthesis four decades ago, his dominant role since then in the development and consolidation of the synthesis, and his long-term interest in the history of his field make him eminently qualified for the task he has set himself in *The Growth of Biological Thought*, which effect analyses the development of those areas of biology of most concern to the evolutionist: the diversity of life, organic mutability, and heredity. He comes to his task equipped with a vast knowledge of biological phenomena, an impressive array of insights, and a collection of strong opinions he is fully willing to voice.

The book is a strange Mayr. It is grand in scope and profound in interpretation. It is also deliberately provocative. Mayr believes that modern students of biology are doubly disadvantaged by a lack of appreciation of the history of their field and by the common assumption that the way to make biology "more scientific" is to make it more like physics. His book stands as a powerful corrective to both these failings. He argues not only that the issues of modern biology can only be understood in the light of preceding debates but also that there are biological problems which are neither "reducible" to physics nor particularly amenable to the quantitative and experimental methods that have been the hallmarks of physics and physiology.

The book is written not so much for the professional historian of biology as for the intelligent layperson, the student of the history of ideas, the practicing biologist, and those "neobiologists" from the physical sciences and mathematics whose technical sophistication is rarely matched by an equivalent conceptual sophistication. Training in the physical sciences, mathematics, or even physiology does not prepare one, Mayr argues, to handle the kinds of questions this evolutionary biologist confronts.

To understand the growth of biological thought, Mayr says, one must have a grasp of the conceptual structure of biology. One must have a feeling, in other words, for the philosophy of biology. Unfortunately, philosophers of science have for the most part assumed that the philosophy of physics should be the model for philosophy of science generally. A proper philosophy of biology, Mayr suggests, would recognize the inadequacy of physics and chemistry to provide a full understanding of living organisms, the "historical" nature of

organisms (and their possession of historically acquired genetic programmes) and the uniqueness of individuals and the genetic variance of populations of individuals.

It would also recognize the difference between the proximate ("how") questions of the functional biologist and the ultimate ("why") questions of the evolutionary biologist and the importance of the establishment of concepts, rather than merely the acquisition of facts, for the history of biology. Other important considerations would be the emergence of novel characteristics in living systems as these systems reach higher levels of organic complexity and the truth that "observation and comparison are methods in biological research that are fully as scientific and heuristic as the experiment." Finally a proper philosophy of biology would acknowledge the possibility of an autonomous biology which is neither vitalistic nor in any other way in conflict with the laws of physics and chemistry, but which achieves "a physical reductionism that is unable to do justice to specific biological phenomena and systems."

Mayr would like to be able to accomplish two things at once: recreate the ideas of scientists of the past while conducting the reader to the biological truths of the present. These goals, however, are extremely difficult, if not impossible, to realize at the same time. Mayr's professional involvement in the major issues of modern evolutionary biology, the vast dimensions of his topic (which force him to "streamline" his account of historical development), and his view, derived from Arthur Lovejoy, that biological problems have "like histories" of their own, all work to a greater or lesser extent against the historical ideal of placing the scientific ideas of the past in their proper historical context. None the less, if Mayr ends up displaying less historical sympathy than he claims for the discarded ideas and conceptual frameworks of biology's past, his book is still a real tour de force, immensely instructive and stimulating at the same time.

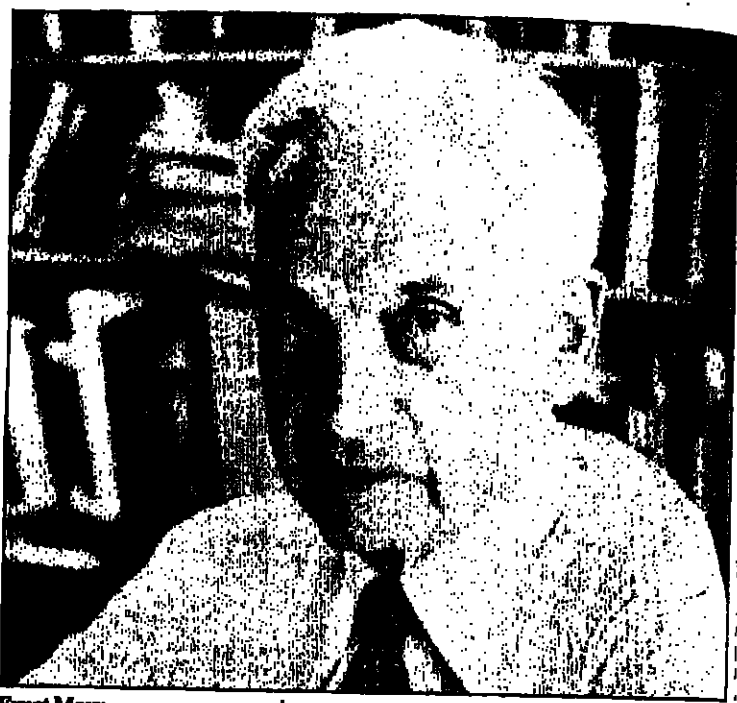
For each of the three areas of biology he considers, Mayr begins with the ideas of the ancients and then escorts the reader up to the present, paying particular attention, appropriately enough, to developments in the nineteenth and twentieth centuries. The section on the diversity of life starts with the classificatory work of Aristotle and concludes with an examination of the three main modern schools of systematics: the numerical pheneticists, the cladists, and the evolutionary taxonomists. The section on the Greeks through Lamarck and Darwin, dwelling in some depth on the structure of Darwin's theory and the evidence at Darwin's disposal. This section then continues, with an especially interesting chapter on post-

Darwinian developments and the evolutionary synthesis, concluding with a survey of "post-synthesis" issues. The final section, on variation and inheritance, surveys early theories and breeding experiments, the development of cytology, the work of Gregor Mendel, the flowering of Mendelian genetics in the early years of the twentieth century, the theory of the gene, and the study of the molecular basis of inheritance.

As in previous writings, Mayr hammers home the significance of population thinking for the understanding of the evolutionary process (scientists who persist in thinking of species as ideal types are incapable of appreciating how natural selection works). More explicitly than in his earlier writings, Mayr also insists upon the paramount role that naturalists have played in the history of biology. As a naturalist and systematist himself, he is keen to dissuade the reader of the popular notion that systematics or taxonomy is nothing more than a kind of "glorified stamp-collecting." The theory of evolution - "the greatest unifying theory in biology" - was, he says, "largely a contribution made by systematists," and most of the individuals of the 1930s and 1940s "who most successfully integrated genetics with the major problems of evolution and backgrounds as taxonomists. What is more, he insists, "It was the study of diversity more than anything else which undermined essentialism, the most insidious of all philosophies. By emphasizing that each individual is uniquely different from every other one, the students of diversity focused attention on the role of the individual; this is turned to population thinking."

In evaluating the scientific response to Darwin, Mayr indicates that "the only solid support Darwin received for his theory was from the naturalists (Alfred Russel Wallace, Henry Walter Bates, Fritz Müller, and others). As for August Weismann, 'perhaps the first evolutionist to ascribe evolutionary changes exclusively to natural selection', Mayr claims; 'It is clear from Weismann's biography and from his research on butterflies that he had been an ardent naturalist all his life'.

While Mayr extols the insights of naturalists with respect to the problems of evolutionary biology, he is critical of the thinking of physicists, mathematicians, and experimental biologists. The physicist and engineer Fleeming Jenkin, typically regarded as one of the most important of Darwin's reviewers, exhibited "all the usual prejudices and misunderstandings of the physical scientists." As for the notion that mathematics is the "queen of the sciences," this, Mayr says, is a myth. The ill-advised application of mathematics to biology led to typological thinking in the case of the geneticist Johannsen; a prime example of how "the adoption of fashionable con-



Ernst Mayr

cepts or techniques failed to produce meaningful results."

If other historians of twentieth-century biology have been inclined to emphasize the role that mathematical population genetics played in reconciling Mendelism with Darwinism, Mayr is quick to point out that for the sake of mathematical tractability the population geneticists oversimplified the factors in their formulas and contributed to the misconception that "genes, rather than individuals, are the target of natural selection." With respect to the limitations of experimentalism, Mayr observes that it was Hugo de Vries' "obsession with the exclusive value of experiment which misled de Vries into believing that mutations explained the origin of species."

Brilliant as were Konrad Lorenz's efforts in developing ethology as a biological field, for example, they did not entail, as Mayr suggests they did, the introduction of population thinking into the biological study of behaviour. As for Weismann's promotion of the idea of the all-sufficiency of natural selection, Weismann seems to have derived this position more from his evaluation of the embryological evidence for the isolation of the germ plasm than from his background as a naturalist.

On the other hand, there is additional evidence to support Mayr's main contention. For example, he could have pursued Weismann's case further in the history of biology has been exaggerated. Contrary to the notion promoted in many biology texts, neither Weismann nor his contemporaries

felt that the inheritance of acquired characters was disproved when Weismann cut off the tails of mice for several successive generations and found that this had no effect on the tail-length of the mice of the next generation. A careful study of the respective roles of experimentalism, alternative explanatory frameworks and other factors in the twentieth-century decline of belief in the inheritance of acquired characters still needs to be undertaken.

Mayr's book is a book of great erudition and insight. No other single volume offers such an extensive account of the history of the subject in question while providing as penetrating a view of the nature of the issues involved in these subjects. It is a little too little to say about the sociology of scientific activity and the broader social and cultural context of the scientific enterprise.

Whether Mayr's appeal on behalf of the non-experimental and non-mathematical side of biology will have any effect on the behaviour of future generations of biologists remains to be seen. In most areas of biology today, the tide seems to be running in the other direction. Interestingly enough, how the tide runs in the future will be determined not only by the kinds of conceptual issues that Mayr has treated so well in this book but also by the various social and political dimensions of science which he says less about, and which still remain to be illuminated.

Richard W. Burkhardt, Jr is associate professor and chairman of the Department of History at the University of Illinois at Urbana-Champaign.

## BOOKS

## Positive polls

**Decade of Dealignment: the Conservative victory of 1979 and electoral trends in the 1970s** by Bo Särkvik and Ivor Crewe  
Cambridge University Press, £27.50  
ISBN 0 521 22674 0

**Explaining and Predicting Elections: issue effects and party strategies in 23 democracies**

by Ian Budge and Dennis J. Farlie  
Allen & Unwin, £18.00  
ISBN 0 04 324008 9

Essex University is where political scientists do things with numbers. Oversimplifying heroically, there are three main ways to do it, all practised at Essex. There is formal, logical thinking in political theory - about equality, democracy, anarchism, for instance; there is statistical analysis of survey data; and there are attempts to mimic econometric modelling based on linear regression equations. Here we have one representative each of the second and third schools. One succeeds; the other doesn't.

*Decade of Dealignment* is the long-awaited report of the British Election Survey for 1974 and 1979. So long-awaited that it appears only as we are digesting 1983: which, luckily, confirms the book's main themes to the last dotting of an i. The British Election Survey has run since 1963 (formerly financed by the Social Science Research Council, it has just been saved from extinction by Robert Maxwell). It is a unique panel survey (that is, it returns and re-interviews the same respondents at the next election) of the electorate's personal history, current preferences, and views about the issues. Earlier waves were reported in Butler and Stokes' *Political Change in Britain* (second edition, 1974), which set new standards in the study of voting.

*Decade of Dealignment*, like the earlier work, is full of good things and it proves again that panel surveys refresh the parts that Gallup can't reach. Only by going twice or more to the same people can you get reliable estimates of the crosscutting political movements which add up to an inter-election "swing".

Swing is not just direct switching. It includes movements into and out of minor-party voting, of abstention, of the electorate itself. Hardly anybody noticed one of Butler and Stokes' main findings, namely that the decline of the Labour Party goes back to 1959. Labour's continuous loss of ground since then has been masked by the turnover of the electorate as old Tories die (or go to prison, or become peers) and young (or immigrant, or ex-peace) socialists take their places. The new book confirms this. Labour's "advance" in 1974 was due only to electoral turnover. If the 1970 electorate had voted in 1974, the Tories would have increased their majority.

Class still shapes British voting, but more weakly with every election that passes. Occupational class is still the best predictor of voting, and this book confronts some modish alternatives with inconvenient facts. For instance, public sector workers and their families are only 5 per cent more pro-Labour than private sector. Unfortunately, Crewe and Särkvik do not test regional, or ethnic, or centre-periphery differences.

*Decade of Dealignment* breaks new ground because it listens to what the voters think. The old model was strictly non-ideological. Political change in Britain (or any other democracy) was due not to voters changing their minds or parties ceasing to offer them what they wanted, but to changes in the franchise (thus Labour got its break in 1918), to social mobility, differential mortality and fertility. Tories live longer (for general elections on average, while the Labour supporter expires after 12), but Labourites have more children. Make a baby for Labour, as Alan Watts headed his review of Butler and Stokes.

That picture was always incom-

plete. While correct as far as it went (as the electoral turnover statistics confirm), it ignored the rival, rational-choice postulate that voters have choices of their own. But Särkvik and Crewe show that the voters have deserted Labour because they no longer want what Labour offers. Not entirely Labour's fault: they show neatly that everybody dislikes "the unions", while most union members approve of the job their own union is doing. They provide less of an ideological explanation of the Conservatives' decline. (Yes, decline. They did less well in 1979 and 1983 than in 1950 or 1951.) These conclusions are curiously muted in this big book, although Crewe has put them forward pungently elsewhere. The book could have done with sharper editing (at £27.50 right-justified setting would have been nice), but it will be indispensable for a long time.

**Explaining and Predicting Elections: issue effects and party strategies in 23 democracies** by Ian Budge and Dennis J. Farlie  
Allen & Unwin, £18.00  
ISBN 0 04 324008 9

**Strikes in Europe and the United States: measurement and incidence**

by Kenneth Walsh  
Frances Pinter, £15.75  
ISBN 0 86187 290 8

In 1924, the International Labour Office (ILO) issued guidelines for the collection of strike statistics. Governments adopted them selectively and sometimes whimsically; they are now antiquated; and more recent efforts by supranational agencies to cajole or induce governments into standardized practice have been half-hearted or maladroited. Little Englanders will rejoice to hear that this includes the Statistical Office of the European Economic Community.

Varying practice in the community nation partly reflects bureaucratic inertia. But some countries would show up spotier in the international comparisons for strike-free beauty (which is judged by multinational investors) if they altered their official classifications and procedures. France not only excludes political strikes from its official government figures - Britain does too - but also stoppages in agriculture and national and local government services. Acceptance of a standard threshold for inclusion, that is to say the definition of how many persons must stop work for how long (to get themselves officially enumerated as a strike, would, depending upon what the threshold was, quite probably modify sharply the images countries currently have for their level of industrial conflict. For the record, Britain, Italy and Ireland, which have the highest reported stoppage levels in the community, also have, in Dr Walsh's judgement, the most stringent recording procedures.

So far as he sticks to these issues, Dr Walsh does a thoroughly professional job and fills a real need for a handy reference work on the technical pitfalls in these national statistical series. In a first part, the general problems that arise in making international comparison of strike activity are given a straightforward treatment. A lengthy second part lists for each in turn the methods of collection used by member countries (except Luxembourg in 1972 and tabulates key strike activity data for the period 1972-81. To locate the material in a wider framework, this information is supplied for the United States also.

There then follows a far less helpful third part, where Walsh embarks upon a comparative discussion. The author himself candidly expresses hesitations in so doing, and repeatedly frets over whether his demonstration of the incomparability of these data-sets has been so thorough that he will look eccentric by then proceeding to compare them. This self-criticism is misplaced. The real trouble is that the author is obviously far less at home with the institutional and social aspects of industrial relations, with international comparison in social science, and with the more recent literature on these topics.

As Walsh himself points out, national methods of strike-data collection are fairly stable over time. This one is entitled to pay special attention to trends that recur from one society to another. It is at this point that statistically less cautious but sociologically more imaginative investigators will find the data exceptionally tantalizing. How much have strike rates fallen in

response to recession? Overall, much less, it seems, *prima facie*, than claims about "new realism" in Britain might suggest. Have there been any significant shifts in the strike propensities of industries or sectors? Some of the figures provided seem friendly towards the claim that, while manufacturing may become less strike-prone, militancy will increase in non-manual workplaces, particularly among certain "service class" groups in public employment. But although the publishers prominently represent the book as an "international, comparative study of strikes", its treatment of these more absorbing issues for cross-national industrial relations investigation is unsatisfying and unconfident.

This is a book that will be useful for graduate-level research training. Observers of advanced capitalism will find themselves slipping an analytically very thin soup.

**Michael Rose**  
Dr Rose is senior lecturer at the Centre for European Industrial Studies at the University of Bath.

**Urban elements**

**The Politics of Location: an introduction** by Andrew Kirby  
Methuen, £11.95 and £5.95  
ISBN 0 416 33900 X and 33910 7

What are we to make of the current outpouring of books in political geography? It is a sub-field which until recently has been distinguished by a debilitating eclecticism, its practitioners claiming to be able to analyse the geographical or spatial aspects of everything from exclusive fishing zones to public library catchment areas. Its focus used to be firmly behavioural - looking at what difference it made to people's social life (especially their spatial movements or perceptions of territory) when political boundaries cut across geography, or ethnicity or economic relationships. This is still a conception which lingers on to confuse the newer work in the field and to undermine the theoretical coherence of many introductions to it.

Andrew Kirby's book represents a newer strand in political geography; one which sees its role very much in terms of understanding the effects which politically-determined distributions of facilities have in structuring the production of cities and regions. His focus is thus exclusively on the political geography of arrangements within a nation state, with a useful emphasis on consumption of public services throughout. The main problem here may be in seeing how this "political geography" differs from "urban geography". Indeed there is not much in it.

"Political geography" for Kirby is largely a codeword for a new liberal agenda in urban and regional studies, countering the intellectual advances made by Marxist and neo-Weberian theory largely from outside the discipline. This new agenda marries some of political economy urban theory with traditional geographical concerns about the impact of spatial arrangements on people's behaviour, concentrating on how government decisions help to determine people's access to services or political representation as the glue to hold them together.

socialist, Finn Gisel is bourgeois, and the Labour Party is unclassifiable random noise.

They classify issues into 14 types, and assign scores to the parties on whether they do well or badly when the issues are raised. These are the raw materials of their regression equations. Out of all this comes the modest truth that parties don't argue with one another, but "talk past" each other, with each emphasizing "its own" issues. Pitt and Fox could have told us that.

**Iain McLean**  
Iain McLean is fellow and professor in politics at University College, Oxford.

I am not sure that this formula works for a number of reasons. First, it is an extremely discipline-bound conception within which to start analysing urban policy-making. It gives a lot of attention to mapping outcomes - who gets most access to schools, hospitals or Parliament, and so on. But the causal outcomes needed to explain why these part they have to do with processes which are in large part or completely non-geographical.

Even where geography plays a direct role, it requires a fairly detailed political science account to make sense of many situations. For example, Kirby has a chapter which is interesting enough in its way as a description of how British constituency boundaries are drawn and with what results. But the basic process by which the Conservatives have acquired a massively favourable balance of seats for votes from the operations of supposedly neutral boundary commissioners is never really explained.

For an adequate account here one must return to the local government reorganizations of 1965 and 1974 when Conservative governments, largely off their own bat, re-drew the local government map of Britain to their enormous advantage. Ten years later, along came the Boundary Commissioners with a brief to match up parliamentary constituencies to these boundaries, with the result that the initial gerrymander has been faithfully reproduced in time to add a further artificial dimension to the Tory landslide of 1983. This is a level of depth of understanding of the political system which any political geographer will have trouble in containing within the sub-field, despite its obviously central relevance.

Second, despite Kirby's attempt to

limit his focus to the urban and regional level, the diversity of subject-matter covered here is too great, so that the eclecticism of older political geography re-appears in a strained attempt to convey a mass of information about "deprivation" in education and health care, space-related conflicts over London airport and nuclear power stations, and local controversies over road schemes or urban renewal. Perhaps the problem here is no more than geographers' now characteristic vice of over-burdening their texts with unprocessed text and figures. But at many points I had difficulty in assimilating the new empirical information being reconstructed, the argument being pursued after each new data onslaught.

Finally, the underlying problem for urban political geography as much as for the rest of human geography is that there is no currently viable theory of space (or of the role of spatial variations in the production of cities and regions) which comes close to matching the power and rigour of urban social theory as it has developed in the past few years. Kirby perhaps makes life unnecessarily difficult for himself - ignoring Oliver Williams's pathbreaking ecological approach in *Metropolitan Political Analysis*, for example. But the fundamental asymmetry remains: we have well-developed theories of urban outcomes based on the proposition that spatial variations and conflicts are superstructural, determined not determinants. The arguments offered against such claims, however, seem to be little more than pragmatic examples and a hunch that spatial or territorial differences ought to be more important.

Kirby writes at the crest of a small wave and we must to some extent take him as spokesman for a genre. This is a role he fulfils much better than most, even if fundamental doubts about the genre itself remain.

**Patrick Dunleavy**  
Patrick Dunleavy is lecturer in government at the London School of Economics and Political Science.

The eighth annual review of BBC *Broadcasting Findings* has just been published. It covers research into viewing and listening patterns for the period January 1981 to July 1982, and looks into audience reaction to some particular programmes - *Ireland: a television history* and *The Archers* are among the case studies. The review also includes information on public awareness of CEEFAX facilities. (BBC Publications, £6.50).

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## Art of the probable

**Probability and Certainty in Seventeenth-Century England: a study of the relationships between natural science, religion, history, law and literature** by Barbara J. Shapiro  
Princeton University Press, £26.00  
ISBN 0 691 05379 0 and 10146 9

Barbara Shapiro made her name in the 1960s with a famous article in *Past & Present* on "Laudianism and science in seventeenth-century England", in which she argued that moderation was the predominant religious attitude of those associated with the new science of the day. A subsidiary theme in the article concerned the theory of knowledge of "laudanarian" thinkers such as Bishop John Wilkins, equally applicable to both science and religion. Such writers claimed that there were "defining words" of certainty and that it might be necessary to be content with merely probable truths.

Greatly elaborated, this basic point forms the core of the work under review, which deals with the changing views of seventeenth-century English intellectuals about the possibility of acquiring certain knowledge, in the context of more critical attitudes towards evidence in general.

Since the 1960s Barbara Shapiro has looked at law and at historical writing. In the seventeenth century and she has brought these disciplines as well as science and religion into her new book, arguing that comparable changes occurred in these areas.

The volume certainly reflects wide reading on a range of topics; text and footnotes are full of interesting information and references. On the other hand, though worthy of a footnote, this book is rather a disjointed work. For one thing, it has even the central theme of its own title was originally suggested to Shapiro by the earlier work of another scholar, Henry van der Laan, and similarly with subsidiary themes such as "moderation" and "certainty". Shapiro's chapter on "certainty" is a commendable attempt to

explain the anxiety about the acceptability of evidence was a major factor in the decline of witchcraft prosecutions in the seventeenth century. As for the epistemology of the new science - Shapiro really has little to say that is novel.

Here a further difficulty arises, for in the exposition of the epistemological ideas of scientists, theologians, historians, lawyers and others that comprises the bulk of the book, Shapiro has an unfortunate tendency to fall between two stools. The basic trends which the author claims link these different disciplines could have been summarized more briefly, as rather tedious. On the other hand, the book still operates at too general a level to do justice to "any single field by fully integrating a discussion of method with the content and content of the studies involved. There is a decidedly old-fashioned air about Shapiro's rather disorganized exposition of the ideas of successive thinkers on her chosen theme.

Finally, the book is rather inconclusive, since Shapiro devotes disproportionately little space to placing the changing views that she documents in context, or to trying to

explain them. The analysis of the European background to the ideas of the English authors surveyed here is haphazard, and one is never sure how far Shapiro is claiming that late seventeenth-century English thinkers were unique and innovative, or how far she is merely documenting an insular version of a more general shift in European ideas.

On the question of causation, Shapiro is unwilling to attribute primary to any of the ideas she covers. The fact that the book begins with science is apparently purely arbitrary, and her general message is that changes that she deals with, though interconnected, occurred in parallel in the different disciplines. But if comparable changes took place in much the same time in various more or less academic fields, why does this say about the relations between intellectuals and the society in which they lived? Did they merely reflect broad and inexorable shifts in the society at large, or did they lead to

**Michael Hunter**  
Michael Hunter is lecturer in history at Birkbeck College, London.



# BOOKS

## Europe's empires

Britain, Europe and the World, 1850-1950: delusions of grandeur  
by Bernard Porter  
Allen & Unwin, £10.00  
ISBN 0 04 90901 9

The main argument of Bernard Porter's extended, interpretative essay is that "Britain's decline derived from fundamental, ineradicable and eventually fatal contradictions in her situation, so that the more she struggled at the end of the rope, the tighter the knot became". What the word "contradictions" seems to imply in this context is that developments in the British Empire stimulated other countries to behave in a way which - whether those others intended it or not - eventually led to the empire's destruction.

In the mid nineteenth century, his argument runs, British imperialism was essentially liberal. The object of acquiring empire was not to win special advantages at the expense of other "natives" or of other imperial powers, but to create conditions within which traders - British, indigenous or foreign - could conduct business. Other European powers, impressed by Britain's prosperity, developed empires of their own; but these empires, unlike the free trade British Empire, were closed economic systems. It would be interesting to learn why those Europeans struck out in that direction; but from Britain's point of view the effect was "the transformation of a commercial empire into a territorial one". What the author does not show quite so convincingly is why this "contradiction" produced that particular effect.

He seems to argue that adverse economic developments during the 1870s played a critical part, and he is probably right.

By the turn of the century, the other European empires "all seemed threatening, for different reasons: Russia out of ambition, France out of resentment, Germany out of jealousy". The British retorted at first with a brash and ugly jingoism which reached its epitome in the Boer War, but later through *ententes* with France and Russia. Alas, the vital *entente* with Germany was never achieved.

During the interwar period the British Empire also lost its free trade character, and the author reminds us of a German diplomat on the eve of the Second World War who foresaw that Britain would lose her empire even if she won that war. The remainder of the story is, in a sense, the working out of that prophecy. In the end, the empire fell apart, while the mother-country drifted into the EEC which, as Bernard Porter observes, "was very little different from an imperial customs union, except that it was adapted to Britain's particular interests less".

The argument that "contradictions" eventually led to Britain's imperial collapse is made forcefully and well. What is not argued so closely is the author's contention that they were fundamental and ineradicable. There were points along the line when serious alternatives did present themselves. Perhaps the free trade empire could have joggled along happily for many years if statesmen had given more attention to social problems at home, particularly the land system, and less attention either to further imperial expansion or to European diplomacy. Perhaps if Britain had sought *entente* with Germany as eagerly as she sought *entente* with France and Russia, the 1914 war could have been averted.

Perhaps it lay in Britain's power to pursue different economic and/or foreign policies in the 1930s, which could have averted the 1939 war, or at least kept Britain out of it. If

these alternatives had been taken, there is something to be said for the view that a liberal British Empire could have formed the nucleus of a liberal world, and not withered into impotence.

There are some oddities of language - "A fully-fledged frog" and "papering over the dilemma" conjure interesting visions - and some inaccuracies - Roosevelt was absent from Potsdam for the very good reason that he was dead; the important protection given by the 1906 Trade Disputes Act was against liability in tort, not in contract.

Roy Douglas

Roy Douglas is reader in the department of general studies at the University of Surrey.

## The pope's downfall

England against the Papacy 1858-1861: Tories, Liberals, and the overthrow of papal temporal power during the Italian Risorgimento  
by C. T. McIntyre  
Cambridge University Press, £20.00  
ISBN 0 521 24237 1

C. T. McIntyre deals with a period in which an English Tory government, formed when the Protestant and protectionist rump was still near the peak of its influence in the Tory party, was succeeded by a Whig government in which Palmerston was solidly and Russell flamboyantly anti-papal, and Gladstone had recently undergone a permanent conversion to the Risorgimento after personally inspecting the evils of government in Rome and Naples.

It was true that (as Russell constantly insisted in public) Britain had interests in Italy, even in the papal states - the Anglo-Roman Gas Illumination Company trained Italians to "turn English" wrought iron into Anglo-Roman gas lamps and there came English interests in the Spanish railway from Rome to Civita Vecchia. But British economic interests in Italy were really marginal, and Mr McIntyre is therefore right to ascribe the substantial role played by the governments of Derby and Palmerston in the downfall of the temporal power of the papacy to ideological hostility, and he has no difficulty in showing that some even of the more lurid flights of Protestant imagination were to be detected in high political quarters that ought to have known better.

Coupling this with the knowledge of hindsight that the united, parliamentary Italy of the House of Savoy was a good deal less inviting than the English liberals expected, and with a detailed diplomatic narrative based on all the sources available, which shows that the British Government was frequently caught out by the daily development of events, he creates the impression that Pius IX was the hapless victim of a gang of mindless Orange bullies, and it is not difficult to use the paper sources to create a story (in the non-party sense) view of the events to show how easy it was for committed minorities in the Italian National Society to get up local revolutions, and to legitimate them by cooking the voting in plebiscites to secure almost unanimous approval for the annexation of papal territories by Sardinia. The implied conclusion is that this mixture of jealousy, incompetence and incompetence could hardly be expected to produce anything other than the rather unlovely Italy of the generations up to Mussolini.

The strength of the book is Mr McIntyre's diplomatic narrative which adds much circumstantial detail to what has been known already; its weakness is that the analysis is not accompanied by an (arguably not) analysis and the limitations of the various powers involved. At least one of the British ideological objects, for example, was not foolish. There have been sharp limits to religious toleration in Italy over the last century; without going through such a process as actual revolution, the papacy would never have been able to survive.

It is hinted that British assumptions that papal government was incompetent were untenable, but that government is shown to have alternated between insisting it could govern its subjects if left alone, and proved in the event to have small powers of resistance. The long-term prospects for Habsburg domination for Italy were clearly no better than the rest of their polyglot domains, and the Habsburgs are shown there to acknowledge the fact. Nor is the cost of Pius's policies reckoned here. French Catholics spent a decade agitating in favour of the temporal power which they should have spent in coming to terms with industrial society, while Irish volunteers, these unpredictable lions under the papal throne, went back home to become Fenians. In short, Mr McIntyre offers a monograph strong on detail, much less strong on wider perspective.



The second issue of the Russian journal *Lesht* (Woodgoblin) bore this cartoon on its cover. It is one of many arresting graphic designs of the period brought together by David King and Cathy Porter's book *Blood and Laughter: caricatures from the 19th Revolution* (Cape, £12.50 and £6.95).

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However, Fischer's work also gives rise to a number of questions. To begin with, in a book which bases an examination of a political organization upon an analysis of the class background of its members, remarkably little is said about what class determined almost solely by occupation. But is this very limited definition, which most social historians understand by class?

As Fischer freely admits, his statistical work "obviously falls short of the techniques of stratified random sampling employed by the contemporary social scientists". Of his statistics on the SA before the Nazis came to power, more than half concern stormtroopers in Munich in 1922. This makes all the more disturbing the tendency to elide the pre and post-1933 SA. Fischer probably would argue that, since the social composition of the SA did not change markedly with Hitler's coming to power, 1933 did not make that much difference. But the fact that the Nazis had come to power meant that motivations for joining the organization changed considerably after January 1933.

Perhaps the most fundamental problem concerns the attempt to draw conclusions about political behaviour from occupational background. Fischer seems to assume a fairly unproblematic connection between material deprivation and political radicalism. But how is one to reconcile observations of tremendous apathy among the unemployed during the depression with Fischer's picture of hundreds of thousands of young workers driven by unemployment to radical political activism? The process, which gives rise to political violence, is rather more complex than Fischer's model would allow.

Richard Bessel

Richard Bessel is lecturer in history at the Open University.

# BOOKS

## EDUCATION

## Humanities in school

Authority, Education and Emancipation: a collection of papers by Lawrence Stenhouse  
Heinemann Educational, £12.50  
ISBN 0 435 80854 0

The late Lawrence Stenhouse, teacher turned educational researcher, was probably best known for his leadership of the Humanities Curriculum Project in the late sixties and early seventies. This project, jointly funded by the Nuffield Foundation and the Schools Council, was given special urgency by the decision to raise the school leaving age to sixteen. The present volume takes that project, its inspiration, its promotion and evaluation, as its focus.

The book begins with a foreword, which is really Stenhouse's academic autobiography, and this is followed by 16 pieces of work most of which have been published before. These items are grouped into three parts, each part pertaining to a different period of the author's work (roughly pre-project, project, and post-project) and each having its own brief editorial introduction.

Two principal educational aspirations, one egalitarian and one liberal, are expressed in Stenhouse's book. The egalitarian aspiration is that the schools should aim to make the benefits to be derived from an education in humanities (which Stenhouse claims have been largely confined to an elite) much more widely available, and in particular, to those pupils directly affected by the raising of the school leaving age. The liberal aspiration is seen as complementing the egalitarian one: that a new method or style of teaching should be devised, especially for 15-16-year-olds about to leave school, which treats pupils/students as young adults and minimizes reliance on the authority of the teacher.

In the Humanities Curriculum Project it was proposed that the first aspiration could be met by devising a programme of study based on an examination of controversial human issues likely to engage the attention of older pupils/students, such as war, education, the family, and relations between the sexes. The second aspiration was to be met by proposing that the examination of such controversial issues should proceed by pupil/student discussion with the object of requiring the participants, as far as possible, to "think for themselves" about these issues. The teacher, on the other hand, was conceived as a "neutral" chairman who might nevertheless challenge the participants to produce evidence or grounds to support the claims they make. These discussions were to be supported by packs of material - what Stenhouse often calls "evidence" - drawn from the field of humanities (social studies, arts and religion).

In so far as Stenhouse's book is an account of the development and implementation of the ideas (the "theory") behind the project (which it largely is) it is distinctly thin. There is a persistent vagueness about many of the ideas, an



Lawrence Stenhouse

absence of sustained and detailed argument for the points of view presented, and occasionally, plain evasiveness in dealing with difficulties others have raised about some of the project's leading ideas - for example, the idea of teacher neutrality.

Take the notion of *humanities* itself. The term is defined by a list (social studies, arts, religion); there is no systematic discussion of the educational value of the humanities; and apart from a quotation from the 1910 edition of the *Encyclopaedia Britannica* there is no reference to renaissance humanism where claims for the humanities

## Gaining a PhD

How the PhD came to Britain: a century of struggle for postgraduate education  
by Renate Simpson  
Society for Research into Higher Education, £9.75  
ISBN 0 900868 95 3

It is difficult today to imagine postgraduate research without the PhD degree and its accompanying thesis. Yet the PhD was a latecomer to the British university scene; it was introduced only at the end of the First World War, imposing a standardized pattern on research activities which were already complex and well-developed. In this useful monograph Renate Simpson speaks of a "century of struggle", but it was not really until the 1850s and 1860s that the research ideal of the German universities, the home of the PhD, began to make an impact on British discussions of university reform, and the same decades saw the first of many calls for the promotion of scientific research and advanced training to prevent Britain falling behind her industrial rivals.

The background to the story is familiar, but Simpson breaks new ground in showing how the idea of a postgraduate phase of study was gradually clarified, and she brings together much scattered material from university archives in order to trace the developments in individual universities. At Oxford and Cambridge, devotion to the old ideal of liberal education and a grudging attitude to graduates of other universities were obstacles to progress, but there were bolder initiatives in London, Manchester, and Birmingham. It was in the 1890s, it would seem, that something like the modern pattern of postgraduate research became recognizable. Much

were first staked out. True enough, there are allusions to arguments for the educational value of the humanities which resemble those to be found in P. H.irst's paper "Liberal Education and the Nature of Knowledge" - but they remain allusions to arguments, not arguments themselves.

In the context of the project itself, humanities subjects owe their justification to the fact that they can be quarried for materials to be used in the discussion of controversial human-interest issues - out of which the emancipation of the book's title is supposed to come. But if emancipation really is the object, rather than the humanities (about which Stenhouse communicates no real passion), then what the book lacks is a systematic discussion of what the author conceives to be the relation between knowledge and freedom.

The title of Stenhouse's book promises considerably more than the book delivers. Those who turn to it in the hope of finding a reasonably cogent account of some aspects of liberal-progressive educational thought in the sixties and seventies will be disappointed. An historian of education, picking over the remains of the period, might find it revealing.

Grenville Wall

Grenville Wall is head of the school of philosophy and religious studies at Middlesex Polytechnic.

depended on finance, to build laboratories and to support research students, and what became available owed more to private benefactors than to the state; in Scotland, for example, the situation was transformed in the 1900s by the research grants of the Carnegie Trust.

Each university had its own degree scheme, but none had a PhD. Simpson's most interesting finding is that the campaign for such a degree was not based on the demands of pure research, or the need to train academics, but on a desire to attract more overseas students, whom the existing masters' degrees (which carried no status abroad) or higher doctorates (which took too long) had little to offer. In the 1900s, there was much talk of the need to keep colonial students loyal to the universities of the metropolis, and Oxford took a special interest in the question after the Rhodes scholars began to arrive. But it took the First World War to bring the issue to a head, as it raised the tempting prospect of diverting the stream of American postgraduates from Germany to Britain. The Foreign Office under A. J. Balfour began to prod the universities, and the PhD scheme was the result of two university conferences in 1917 and 1918. Although not all the universities were equally enthusiastic, the PhD was significant as the first degree to have a standard national form, and the whole episode shows how in the atmosphere of war and reconstruction the universities were forming a closer association with each other and with the state.

Renate Simpson does not go beyond 1918, apart from a brief postscript which points out the unanticipated popularity of the new degree with British students, but her book is a welcome addition to the handful of studies which discuss British university history on a national scale.

Robert Anderson

Dr Anderson is lecturer in history at the University of Edinburgh.

## Fast forward

Video: the educational challenge  
by Robin Moss  
Croom Helm, £12.95  
ISBN 0 7099 1747 3

Obviously about video, this very readable book is a polemic against the inadequacy of current teaching methods in meeting the challenges of the next twenty years or so. Robin Moss sees video as a means of revolutionizing current teaching practices; he argues that video should be at the centre of teaching activities, away from "teacher-centred" education towards "learner-centred" study.

Moss argues that video has the potential to stimulate and support individual study, by motivating learners to be self-reliant, to satisfy their natural curiosity, to initiate their own studies. He is frank about the relative failure to date of the educational television units in universities, and of educational broadcasting - interesting views from someone who has just led one such unit to become head of educational programme services at the Independent Broadcasting Authority - but he argues that advances in video technology, and increased familiarity with video equipment, will overcome many of these previous limitations in classrooms and colleges. However, it is the potential of video for non-formal, and continuing education, for learning outside the classroom, which most excites the author.

The weakness of the book is that it rarely suggests precisely how this

potential is to be realized. As well as strident attitudes, there are serious structural and training obstacles to be overcome before video can be used in the ways proposed. There is little discussion in the book about how one would design a curriculum around video, nor how one would design individual video programmes to achieve "learner-centred" education.

This book is a useful counterbalance to the current emphasis being given to computers in education. Video is a second front in the Information Technology revolution, and needs to be taken just as seriously as computing.

A. W. Bates

Dr Bates is reader in media research methods at the Open University's Institute for Educational Technology.

# Heinemann

## Theory and Resistance in Education

A Pedagogy for the Opposition  
HENRY A. GIROUX, Boston University  
Foreword by Paulo Freire

This book will find a ready market in sociology of education, curriculum studies and social and political education courses and amongst radical educators.

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Standardised Testing in Local Education Authorities and Schools  
CAROLINE GIPPS, STEPHEN STEADMAN, TESSA BLACKSTONE and BARRY STIERER, University of London Institute of Education

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## Authority, Education and Emancipation

LAWRENCE STENHOUSE

This collection of papers, the last book that Lawrence Stenhouse worked on before his untimely death, is evidence of a line of thinking which he pursued in various professional contexts. The book is a rich source of material for students of curricular issues and all involved in education and educational research.

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# CHICAGO



# HISTORY OF EDUCATION

Editor: Professor K. Charlton  
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## BOOKS

### EDUCATION

## Without a voice

Timely Voices: English teaching in  
the 1980s  
edited by Roslyn Arnold  
Oxford University Press, £3.50  
ISBN 0 19 554363 7

It is difficult to imagine the teacher  
of English who will derive from this  
book the continuous inspiration that  
the tone of the editor's introduction  
might lead us to expect. "Timely  
voices" should resonate harmoniously  
while retaining their intrinsic qual-  
ities as instruments of experience.

Six of the contributors are Aus-  
tralian, five are British and two Amer-  
ican. All were asked to write about  
"an aspect of English education they  
felt strongly about at present". In  
the event it is not, on the whole,  
strength of feeling but the duller  
virtue of academic soundness that  
prevails. And this, at the outset, is  
an important reservation; for unless  
classroom teachers of English are  
persuaded to give ear to these "timely  
voices" the effort is wasted.

The picture of English teaching in  
Australian schools that emerges in  
this book is depressingly similar to  
that presented much more graphically  
by David Holbrook some years  
ago in *English in Australia Now*. But  
where that was passionately felt and  
vividly written - a real "voice" was  
to be heard there - here the sluggish-  
ness and the philistinism, the endemic  
behaviourism and utilitarianism are  
laboriously demonstrated through "re-  
search". We surely don't need to in-  
voke and elaborate Kelly's "personal  
construct theory" in order to show  
that pupils internalize their teachers',  
or even for success in English - "Too  
many Australian teachers 'organise  
their pedagogy mainly in terms of  
teaching the mechanical skills' (C.  
T. P. Diamond). The Kuhlman  
"theory of paradigm shift" didn't  
have to develop for us to understand  
the stranglehold exerted by dis-  
credited models of English teaching  
(Paul K. Brock). It is only in those  
contributions where the teachers  
themselves come to the fore - their  
practice described, their difficulties  
acknowledged - that the reader will  
feel challenged with any sharpness to  
reflect on his own. Margaret Gill's  
chapter, "Three Teachers: defining  
English in the classroom" shows  
those teachers struggling intelligently  
and fruitfully to implement a concep-  
tion of good English teaching when  
faced with the frequently negative  
influence of examinations, and syllab-  
uses and the outdated ideas they  
express.

The efforts of those teachers are  
implicitly indebted to the prevailing  
influence of the British contingent in  
*Timely Voices*: James Britton and  
John Dixon particularly. (Dixon's

and Douglas and Dorothy Barnes' chapters are useful, indeed timely, reports on research in progress, the first on written responses to litera-  
ture, the second on the present and  
traditional narrowness of the writing  
demands made on pupils at the  
secondary level). Like Margaret  
Gill's, Britton's chapter, "Reading  
and Writing Poetry", is one of the  
handful worth going back to. Though  
brief and sketchy it acknowledges,  
describes and compels our attention  
to those "undercurrents of feeling  
that make learning a rich and per-  
sonal experience".

Elsewhere the sketchiness leads to  
a degree of tendentious generaliza-  
tion from the most unlikely quarters:  
"Our most pressing current reading  
problem with regard to adolescents is  
not to make the classics readable but  
to deepen and extend reading skills  
developed on a range of narrative  
texts we know nothing of too little,  
about - new comic strips, films,  
video images and the mental images  
that go with them" (Margaret Meek).

Our most pressing current reading  
problem? I would willingly trade  
several chapters of Australian re-  
search for a thorough development  
and scrutiny of that.

Roger Knight

Roger Knight is senior lecturer in  
education at the University of  
Leicester.

## Conditions of service

Teaching Under Attack  
by Walter Roy  
Croom Helm, £14.95 and £6.95  
ISBN 0 7099 2212 4 and 2213 2

Walter Roy is a successful headmaster  
and a prominent member of the execu-  
tive of the National Union of Teachers.  
The book, quite naturally, reflects the  
NUT's position on most of the issues  
considered and is concerned with the  
politics of school teaching, in particular  
trade union and professional issues  
such as pay and conditions of service,  
promotion and accountability. It is a  
timely and relevant account; one that I  
will certainly recommend to my stu-  
dents doing the Postgraduate Certifi-  
cate of Education.

The book begins by describing and  
analysing the "challenge to the  
teaching profession". The challenge

comes from predictable sources, fac-  
ing rolls and education cuts, has  
provided a climate in which increas-  
ing control by central government, in-  
cluding an involvement in the curriculum,  
has developed beyond anything that  
could have been foreseen even a few  
years ago. Politicians who "vote as  
each other to compete for votes as  
elected as the real culprits in making  
education a scapegoat for their  
foibles and mismanagement. Strongly  
Shirley Williams (Secretary of State for  
Education from 1976 to 1979) comes  
out of all this relatively unscathed, in  
addition the author fails to distinguish  
the rather different roles played by the  
two major political parties and the  
Department of Education and Science.

The analysis continues into the next  
chapter where the effects of the tim-  
ing of resources available to educa-  
tion and the financial control of local  
government are clearly and effectively  
spelt out. This is probably the most  
important part of the book. It is not  
from his experience as a headmaster  
and from NUT and HMI reports  
Dr Roy is able to detail the less obvious  
but damaging effects of the cuts on the  
educational service, for example  
school book capitalism at 60 per cent in  
1975 levels, cuts in ancillary staff, cuts  
in supply teachers, cuts affecting re-  
dial teaching and specialist areas like  
music, computers and swimming. In  
addition he shows how changes in the  
basis of the capitation allowance (to  
include items which were originally  
part of a common service) inflict cut  
while at the same time enabling politi-  
cians to claim that they are maintaining  
an increasing provision.

The chapters that follow deal with  
the teachers' unions and pay and  
conditions. They are informative and  
up to date. Valuable information that  
all beginning teachers should have  
under their belt. The final chapters on  
accountability and the essence of pro-  
fessionalism are perhaps the weakest.  
The issues are not thought through  
with the same clarity as the early  
chapters and the case for teacher  
autonomy reads more like special  
pleading. The contradictions involved  
in being a "profession" (law and medi-  
cine are the models referred to) and  
remaining able to develop the dis-  
tinctive relationship with pupils and  
parents that Walter Roy sees as the  
essential core of teaching, are not  
examined. Certainly the bromides con-  
tained in the last chapter no more than  
scratch the surface of this dilemma.

Colin Lacey

Colin Lacey is professor of education at  
the University of Sussex.

## Under the microscope

Sociology and the School: an  
interactionist viewpoint  
by Peter Woods  
Routledge & Kegan Paul, £5.95  
ISBN 0 7100 9342 X

The theory of symbolic interaction de-  
veloped in the USA in the 1920s and  
1930s out of work of W. I. Thomas and  
G. H. Mead. With the notable excep-  
tion of Waller's great work, *The Sociol-  
ogy of Teaching* (1932) to which Peter  
Woods pays surprisingly scant atten-  
tion, few serious attempts were made  
to apply the interactionist perspective  
to educational institutions. In Britain it  
was recognized only in the 1960s that, to  
understand more adequately the rela-  
tion between school and society, we  
needed to open up the "black box" of the  
school.

Over the next fifteen years very  
many studies of school life were under-  
taken with the interactionists' distinc-  
tive microscopic focus on the details of  
people's routine existence. Though  
they had the work of Goffman and  
Becker to hand, researchers had rel-  
atively few guidelines, in either theory  
or methodology; the total immersion  
of the researcher into schools and  
classrooms for long periods of time was  
daunting to sociologists trained in the  
more secure methods of the question-  
naire and the survey.

Today this methodology is both  
more respectable and better defined.  
And there are results to demonstrate  
its validity. In this book Woods gathers  
together in a most thorough way all this  
research, and his impressive evidence  
should confound those critics who have

scathingly denounced interactionism  
as trivial in its concerns and insubstan-  
tial in its research findings. Woods  
organizes his chapters around the cen-  
tral concepts of interactionism and cap-  
tures the rich and fascinating com-  
plexities of the lives of teachers and  
pupils. Fortunately the book is well  
written, with a sparing use of preten-  
tious technical language and Woods  
transforms the jumble of fifteen years  
research into a reasonably coherent  
sociological account of the school. At  
least among the book's virtues is the  
emphasis on the practical implications  
of these studies for the improvement of  
teaching quality.

On the other hand, Woods barely  
mentions the criticisms that have been  
brought against interactionism and this  
somewhat limits his vision of the future  
of interactionist research in education.  
For example, it is said that interaction-  
ists show a bias towards those with low  
power, since with such people it is  
easier to negotiate research access.

The result is that we know almost  
nothing about the working of senior  
management teams in schools, though  
they make most of the key policy  
decisions; about the meetings of school  
governors; about the relations between  
headteachers and the local authority;  
and the relations between education  
officers, inspectors and elected mem-  
bers.

Even within interactionism's tradi-  
tional territory of the classroom, we  
have too few detailed studies of the  
contrasting patterns of interaction in  
different subject lessons. Perhaps  
Woods's excellent text will attract a  
new generation of researchers to these  
important tasks.

David H. Hargreaves

Dr Hargreaves is reader in education at  
the University of Oxford.

## BOOKS

### EDUCATION

## A gloomy picture

Contemporary Education Policy  
edited by John Ahter and  
Michael Flude  
Croom Helm, £9.95  
ISBN 0 7099 0512 2

Old Fabians might be forgiven a wry  
smile as they read this volume of  
essays. For, although they will look in  
vain for any acknowledgment of the  
fact, "contemporary education policy"  
turns out to employ an analytical  
framework not very different from the  
writing of at least a minority of Fabians  
twenty years ago.

True, this policy analysis is sadder  
and wiser. We have had years of  
industrial stagnation, rising unemploy-  
ment and the failure of soft legislation  
to ameliorate the problems of educa-  
tional inequality, urban decay and  
disadvantages of gender, ethnicity  
and age. So no wonder there is now  
a stronger emphasis on the ultimate  
constraints of the economy and the  
persistence of privilege.

Nevertheless (as perhaps rather too  
many of the contributors feel it neces-  
sary to point out lest we remain the  
victims of recent neo-Marxist heresy)  
there is no longer blanket pessimism  
about an all-determining economy.  
"Autonomy" is the buzz-word, and  
there is once again room in theory for  
individual and collective action.  
However, in an interesting opening  
discussion of recent changes of intellec-  
tual fashion in the sociology of educa-  
tion, John Ahter warns against swing-  
ing too far towards the alternative  
approach of the Birmingham Centre  
for Contemporary Cultural Studies.

The CCCS, he feels, uses history  
illegitimately to present today's manu-  
al workers as a class generated by the  
economy but neglected, waiting to  
support socialism. Antagonistic both  
to the state and the teaching profes-  
sion, the CCCS's hope for grassroots  
political activity is, Ahter suggests, an  
infant's play learning approach which  
underestimates the problems of repre-  
sentativeness and the need for strong  
central policies as a rallying ground.

Appropriately, a third of the essays  
deal with the education of teenagers  
and young adults, analysing con-  
tinuities in selection and tracing their  
most recent manifestation in attempts  
to split "education" for middle-class  
students from "training" for working-  
class youth. Here, Williamson usefully  
contrasts with England the much more  
thoroughgoing German approach.  
Elsewhere, Professor Halsey con-  
tributes a characteristically optimistic  
article on the possibilities of English  
schools developing towards a Yugoslav-  
ian type of democratic control.

The reinstatement of policy analysis  
is to be welcomed, although it leaves us  
with uncomfortable questions akin to  
those about history, as to what we learn  
from particular historical case studies  
(such as Andy Hargreaves's discussion  
of middle school development) beyond  
a mistrust of blanket theorizing and a  
heightened sense that "circumstances  
alter cases".

Yet perhaps there are some common  
themes. The book concludes with three  
excellent analyses of the policies of the  
major political parties, which further  
underline the continued failure of  
policy to come to terms with inequality  
in English education. Indeed, as Roger  
Dale points out, Thatcherism delib-  
erately aims to foster selectivity and to  
cut down what is seen as destructive  
social engineering "interference" with  
what are asserted to be natural and  
valuable differences of talent, desert  
and reward. Fortunately Thatcherism  
has not - at least up to the present -  
been given full rein. Michael Flude  
argues convincingly that the SDP's  
middle-class supporters may have been  
prominent in fighting the Thatcherite  
cuts in education; but they are not  
committed to any fundamental restruc-  
turing of education which would  
undermine their present privileged  
position.

This leaves us looking to Labour for

any hope of ameliorating educational  
inequality. But once again the analysis  
of the content of education, the  
distinct alternative educational policy,  
turns out to be a bulwark against the  
narrowing requirements of industrial-  
ists.

By default, Flude argues, the most  
damaging educational legacy from  
Labour was Callaghan's policy of link-  
ing education to industrial regenera-  
tion. Employers easily resisted any  
weak attempts to make them more  
accountable in the industrial sphere,  
but meanwhile extended their influ-  
ence over education in the name of  
greater "accountability". So ironically  
it is to the Labour Party as much as to  
Thatcherism that we owe the present  
potentially disastrous political and  
educational ascendancy of those whom  
Raymond Williams has called the "in-  
dustrial trainers".

Dennis Marsden

Dennis Marsden is reader in sociology at  
the University of Essex.

## Continuing concerns

Continuing Education for the Post-  
Industrial Society  
edited by Neil Costello and  
Michael Richardson  
Open University Press, £6.95  
ISBN 0 335 10186 0  
English University Adult Education  
1908-1958: a unique tradition  
by John A. Blyth  
Manchester University Press, £17.50  
ISBN 0 7190 0903 0

The starting point of *Continuing  
Education for the Post-Industrial  
Society* is a paper given by Lord  
Ritchie-Calder in Rochdale on the  
occasion of the Open University's  
tenth anniversary. In it he argues  
forcefully for the recognition of two  
profound revolutions within our soci-  
ety: the rapid approach of "non-  
work" in a post-industrial era and  
the rapid development of educational  
technology. This paper now leads an  
anthology which is divided into two  
sections, on "contexts" and "res-  
ponses".

In the first section Eric Thompson  
assesses the ability of our present  
educational structures to cope with  
the real needs of society; Lord Perry  
calls for a reassessment of our initial  
education system as the only way of  
properly founding continuing educa-  
tion, while outlining the advantages  
and limitations of distance learning  
systems. He argues that the real pace-  
makers may emerge from the third  
world and possibly China. In the last  
paper in the section, on the Lancas-  
ter research projects, Keith Percy  
questions whether we now know  
enough about adult education to be-  
gin to conjecture about the future.

The six papers in part two display  
personal, unorchestrated reactions to  
some of the issues raised. Jack Tivy  
envisages a regional educational ser-  
vice, based on community need, and  
goes to pre-industrial society for his  
image - the guild. Owen Ashmore  
reviews, briefly but lucidly, the  
changes within the university sector  
over the last twenty years and  
suggests that such resources  
should not be concentrated entirely  
upon the narrow band of 18-21 year  
olds. A plea for the development of  
media teaching resources comes from  
Robin Moss; similarly Derek Gains  
catalogues the possibilities of educa-  
tional technology while discussing the  
impact of "student-centered" think-  
ing on adult education. David Con-  
nor describes recent developments in  
the world of a WEA District; Judith  
Bell, using the "woman question" as  
her starting point, pleads for better  
counselling services.

The idiosyncratic nature of the  
contributions gives rise to a repeti-  
tiveness and a lack of cohesion not  
only between but sometimes within  
articles. Gains discusses both tech-  
nology and student needs, but fails  
to relate them; Tivy's model com-  
munity service blandly ignores many  
problems in the field already epoun-

tered, while the editors' decision not  
to consider the political framework is  
a serious omission. The stance of the  
volume as a whole is to demand  
political recognition of immense hap-  
penings just around the corner, but it  
is at variance with its individual con-  
tributors, who seem to anticipate  
quiet and pragmatic recognition of  
that which has happened. And it is  
for this tension and for the occasi-  
onal individual insight that the book is  
worth reading, rather than for its  
provision of a prescription for our  
future.

A similar process has taken place  
before, and *English University Adult  
Education, 1908-1958* depicts the  
emergence of one type of adult  
education during the first half of this  
century. Blyth concentrates upon the  
universities of Liverpool, Manchester  
and Leeds and their relationships  
with the appropriate WEA Districts.  
Great men, Waller, Raybould,  
McPhee, Tawney, et al - trenchantly  
take the stage, and the author's use  
of personal documents and recollec-  
tion gives a lively sense of their  
abrasiveness and idealism. The  
broader context of the social move-  
ments of the times, while including  
some alarming generalizations, does  
serve to remind us that while we  
worry about "non-work", our fore-  
bears had to initiate a continuing  
education movement not only in a  
much more reactionary climate but  
in the context of radical demographic  
shifts, two world wars and the de-  
pression.

William Forster

William Forster is director of extra-  
mural adult education at the University  
of Leicester.

## Classroom equality

Sexism in the Secondary Curriculum  
edited by Janie Whyld  
Harper & Row, £6.95  
ISBN 0 06 318251 3

There is a need for a book like this to  
discuss not only general sex bias in  
schooling but the situation within in-  
dividual subjects. If sex stereotyping is to  
be removed from the hidden curriculum,  
undoubtedly subject teachers  
must think about their attitudes, analyse  
their teaching materials and look  
critically at the kinds of topics and  
questions set by external examina-  
tions.

After a brisk survey of sex bias in  
school organization and classroom in-  
teraction, this book provides the stimu-  
lus to do exactly that for 14 subjects in  
the curriculum. It is particularly good  
to find included such subjects as craft,  
design, and technology and business  
studies - even if we are told that no  
non-sexist teaching material is avail-  
able in the latter areas. The commonly  
accepted principle of separate classes  
in physical education is well challenged  
but perhaps the case for boys' partici-  
pation in home economics could have  
been more strongly made. Religious  
knowledge and music are not dis-  
cussed, unfortunately.

The authors are mainly practising  
teachers so there is ample reference to  
materials in daily use and examination  
topics with which subject teachers in  
secondary schools are familiar. The  
amount of reference to research in  
different subjects varies somewhat -  
there is admittedly more research in  
some subjects than in others - but all  
the authors seek to give clear practical  
advice on how to make subject  
teaching less biased. Chapters end with  
lists of additional reading, resources,  
organizations from which further in-  
formation may be obtained. There is an  
extensive bibliography.

Some statements lack necessary  
qualification, and the cumulative effect  
of all the instances of disadvantage to  
females is a bit excessive. However, the  
total picture is convincing in showing  
how the curriculum may be teaching  
irrational roles on the basis of gender.  
One must hope that teachers will be  
moved by the appropriate chapters in  
this book to consider exactly what they  
are teaching their pupils.

Margaret B. Sutherland

Margaret B. Sutherland is professor of  
education at the University of Leeds.

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### INTERNATIONAL HANDBOOK OF EDUCATION SYSTEMS

Editors:

J. Cameron, B. Holmes, P. Hursi, R. Cowen, M. McLean,  
London University Institute of Education

The volumes of this Handbook bring together a wealth of basic and  
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Volume III: Asia, Australasia and Latin America  
(edited by R. Cowen and M. McLean)

This volume (ISBN 0471 90214 4) is due to be published late 1983.

John Wiley & Sons Limited  
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# BOOKS

EDUCATION

## Child centred

**Freedom and Education: towards a non-rationalist philosophy of education** by Colin Lankshear  
Milton Brook, \$14.95  
ISBN 09597646 07  
**Mixed Ability Grouping: a philosophical perspective** by Charles Bailey and David Bridges  
Allen & Unwin, £8.50 and £3.50  
ISBN 004 370134 5 and 370135 3

There is a conception of education, currently popular but hardly perennial, in which its connexion with the pursuit of knowledge or the acquisition of skills takes second place to other goals. Because of this, ability is also a secondary consideration and personal qualities and personal goals take precedence – qualities and goals associated with emotions and attitudes rather than with intellect. Probably it is best described as a therapeutic concept of education, with the psychoanalytic overtones that this implies, and its links are with a long tradition of progressivism and child-centred approaches, stemming from Rousseau in the eighteenth century to John Dewey and A. S. Neill in the twentieth.

Two different aspects of this educational outlook are exemplified in *Freedom and Education* by Colin Lankshear and *Mixed Ability Grouping* by Charles Bailey and David Bridges. Each of these books focuses on a fundamental social and moral value at issue in much educational controversy. The concern of the first is freedom, while the second hinges on equality and the related value of fraternity. From different directions both attack authoritarian approaches to education, whether the authority is that of the teacher or that of the state. The latter is a body of knowledge which makes its own demands on learners and imposes a certain order and sequence of study which cannot be set aside in order to foster self-esteem or social cohesion.

Lankshear's purpose is to challenge the received opinion that children are made free by being restrained and directed – that a formal educational setting and a compulsory curriculum promote the development of their

autonomy so that, in adapt Rousseau, children are made free by being everywhere in chains. This view, which Lankshear terms the authoritative or rationalist approach, he sees as based on authority, reflection and discipline. In its place he recommends the "individualist" approach represented by such educators as A. S. Neill, which he describes as involving a commitment to the educational values of individualism, independence, creativity and spontaneity. Rejecting Spinoza's dictum that "a free man is one who lives according to the dictate of reason alone", Lankshear claims that the development of free persons presupposes considerable liberty for children in the course of their education.

In *Mixed Ability Grouping*, Charles Bailey and David Bridges bring a philosophical perspective to bear on the contentious issue of streaming – a fundamental element in the debate about comprehensive education. They effectively draw out the ideological aims and assumptions which underlie much apparently practical argument, although their approach is bedevilled by a tendency – an occupational hazard of philosophers lacking substantive practical issues – to take two steps backwards for every one step forward.

In this case this means that the authors' eventual advocacy of mixed ability teaching emerges with such a high degree of qualification that it would not involve anyone, however impressed by the arguments, changing his or her own practices in any way at all. The question, though, of whether this should be treated as primarily an ideological issue is not itself subjected to the same kind of scrutiny. The practical difficulties of teaching French or mathematics to groups of widely differing abilities, for example, are far too lightly dismissed, given that the weight of common sense must overwhelm any idealism on the side of those who believe that educational and academic goals must be sacrificed if what the authors dubs as cohort methods are abandoned. Nor should it be supposed that this sacrifice is anything other than conscious and deliberate, whether in the case of Bailey and Bridges's recommendations on mixed ability grouping, or in the case of Lankshear's advocacy of classroom control.

Whatever position one takes on these philosophical writers to declare their position and argue positively for particular policies is refreshingly welcome.

**Brenda Cohen**

Brenda Cohen is lecturer in philosophy at the University of Surrey.

## Tell me in your own words

**Tales out of School: consumers' views of British education** by Roger White with David Brockington  
Routledge & Kegan Paul, £3.95  
ISBN 0 7100 9446 9

In his earlier books *In and Out of School* and *Absent with Cause*, Roger White tried with proselytising zeal to communicate to the educational public just what it is that drives youngsters to truancy, vandalism and other sorts of disruptive behaviour. These books were very personal statements, describing the sustained attempt by a handful of committed idealists to provide a practical educational alternative for those youngsters whom the system had condemned through its own failure.

In *Tales out of School*, by contrast, it is not the authors but the youngsters that speak. The first part of the book is a series of interviews with 70 young people aged between 16 and 23, nearly all of whom left school at 16 and who are now either working, unemployed, or inhabiting the "twilight world" of the Youth Opportunities Programme. The interviewees were all volunteers who were selected because they were felt to have something to say about more than just anarchic and aimless behaviour. Although representing a range of backgrounds and experiences – affluent, middle-class, low-density housing estates to inner-city high-rise flats – the predominance of early leavers in the sample means that the picture presented is primarily that of the youngster who leaves school with "little prospect of further education or a satisfying job".

White describes in detail his meetings with the young people at home, in their own words, and the editing and editing and editing of the interviews to selecting and organizing the material – but the editors' presence in the book to a minimum. The extracts from the interview material are reported verbatim, each extract being attributed to the respondent by name.

Part two of the book discusses the policy implications of the young people's views as seen by experts in their field. For example, Neville Bennett is invited to respond to some of the issues raised by the interviewees as they reveal their own experience of entering and leaving primary school. There are many accounts of their pain and bewilderment on moving to secondary school as specialization and size demand a more fragmented organization and the consequent sacrifice of the old security. As Bennett suggests, far from learning the lesson of middle schools in this respect, policy thinking is currently swinging away from a concern to provide for such a transition stage. One reason for this is undoubtedly the fact that the consumer's voice as reported in this book is so rarely heard in such debates.

David Hargreaves takes up the young people's criticisms of secondary school – that it is too inflexible, too unwilling to trust pupils themselves to take responsibility for organizing how and when to learn according to their own needs and circumstances. He suggests the need for a greater measure of partnership in education between pupils, teachers and the community, and for encouraging a less subject and examination-centred curriculum in which teachers can be encouraged to make more room for pupils' own knowledge and interests.

Subsequent chapters on the curriculum, teachers, vocational preparation, job-seeking and YOP are dealt with in similar vein by John Mann, until recently secretary of the Schools Council, Professor John Riggall of Keele University, Andrew Bird, a senior careers officer, Frank Field, MP and Colin Ball, director of the Centre for Employment Initiatives. These practitioners have been chosen as people who are in a position to have some

influence on practice and policy and can thus help to make the young people's views heard. To anyone who has studied the process of policymaking in which pragmatism and finance rank rather higher than professional idealism, this seems a vain hope. On the other hand, it may be significant that it is Frank Field, the only respondent who is not a "professional" educationist, who seems most willing to listen and respond directly to what the young people are saying about the frustrations, the boredom, the poverty and the shame of being unemployed.

Not surprisingly the solutions he offers such as creating more jobs and high technology investment, are couched in political rather than educational terms. Nevertheless they do help to justify the hope that a book such as this if it reaches its wider potential audience of politicians and administrators, will be sufficiently telling to exert some influence on policy.

For the professional there are few new ideas as such in this volume. Its values lie rather in its potential to bring to the forefront of professional debate the idiosyncratic voice of those who must suffer what others decide is good for them but whose own opinion is rarely heard.

**Patricia Broadfoot**

Patricia Broadfoot is lecturer in education at the University of Bristol.

## Crisis of expansion

**Higher Education in the Third World: themes and variations** by Philip G. Altbach

Maruzen Asia, distributed by Blackwell, \$15.00 and \$11.00  
ISBN 962 220 119 2 and 1180

In the advanced nations of the world higher education is going through a crisis – of confidence and of cash. It is interesting that while universities in the third world are facing a similar crisis they are not imposing cutbacks: instead they are still contending with the problems of rapid expansion.

In this book, Philip Altbach draws on his knowledge and experience of the industrial world to explore the problems and dilemmas facing universities in the third world. As one has come to expect from Professor Altbach, this is a timely and well written little book. However, apart from a useful introductory chapter, there is little here that is new, since all the other chapters have appeared elsewhere during the past few years as articles in books or comparative journals concerned with higher education or education in developing countries. As a result there is a degree of repetition of certain themes – student activism, reform, the international domination of western academics and neocolonial relationships between industrial nations, universities and those of the third world. Moreover there is a heavy emphasis on Asia in general and on India in particular.

Nevertheless the gathering together of some of Professor Altbach's papers not only reveals the development of his own thinking but offers much food for thought for all concerned with comparative education or third world educational development. In criticising developing countries' universities for example, do we take enough into account the international and regional influences and pressures which might lead to conflict with the national norms and values which these universities are expected to uphold? Is enough notice taken of the influence of expatriate staff or of the variations in status and position of third world academic staff? Are western academics interested in, let alone concerned about, the considerable efforts being undertaken in many third world countries to reform and to adjust university structures to changing circumstances?

In the first section of the book Altbach explores comparative perspectives in higher education, drawing distinctions between third world countries and comparing their universities with those in the advanced nations. Rapid expansion has occurred in all cases but this has frequently been unplanned and has led to the production



Students at Nairobi Poly.

tion of too many graduates in the social sciences for the employment needs of the country. The dilemmas of expansion at high cost and using western based models are well highlighted. Nevertheless certain countries, Malaysia, Singapore, Kuwait, Taiwan and South Korea – have not only adjusted their universities to the needs of society and avoided graduate unemployment but they have also evolved close cooperation between government and universities in planning for national development. The advantages of this cooperation far outweigh the dangers of increased politicization and loss of autonomy.

Altbach also discusses centre-periphery relationships, in many ways the most important concern of the book. In his second section he points out that while third world universities are very important in the social, economic and educational development of their own countries they are at the same time on the periphery of the "international knowledge networks". This puts considerable strains on them: since the distribution of knowledge is largely through western controlled publishing houses, books and journals, third world academics tend to write for an international readership, in European languages, thus distancing themselves from their fellow countrymen.

The third section is devoted to the strains placed on academic staff as a result of external pressures for more work, publications and research at the same time as the financial resources decline. (Most academics would echo those sentiments!) There is a particularly interesting chapter on the Indian academic profession, especially in Bombay where staff were involved in a bitter salary war with the government. Student activism is also studied and Altbach suggests various reasons why students are far more effective politically in third world countries than in the industrial nations.

The final two chapters are devoted to university reform, one in general and one specifically devoted to India. The pressures for reform – to become more interdisciplinary, accountable, efficient, and relevant – are briefly examined, as are resistance to change. The conclusion is that although there has been some measure of reform the conservatism and inertia of most university systems have minimized their effects. Universities in the third world at the end of the century are unlikely to be radically different from those of the industrial nations in the 1980s.

**Keith Watson**

Dr Watson is lecturer in education at the University of Reading.

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# BOOKS

EDUCATION

## Barely a kind word

**Comprehensive Schooling: the impossible dream?** by Beverley Shaw  
Blackwell, £12.50 and £4.95  
ISBN 0 631 13264 3 and 13263 5

The evolution of the comprehensive school in Britain since the Second World War has been well documented in recent years. There are enthusiastic endorsements written by supporters of non-selective schools, such as Robin Pedley's *The Comprehensive School and Half Way There* by Caroline Bann and Brian Simon, case studies of individual schools like Stephen Ball's *Beaside Comprehensive*, and books proposing a radical reshaping of the very concept and nature of comprehensive education such as David Hargreaves's *The Challenge for the Comprehensive School*.

Beverley Shaw has added to this growing literature with a book which is placed against the comprehensive school and has barely a kind word to say for it. Much of it is devoted to an attack on the notion of egalitarianism, the Labour Party, anti-authoritarianism and the size of and complexity of some big comprehensive schools. Many of the points made are perfectly valid criticisms of a system of education still in its infancy. Some of the negative observations are, however, quite unfair. For example, he dismisses tertiary colleges in a few paragraphs, though he seems to know little about them, and he comments favourably on grammar schools and secondary moderns with 300-400 pupils, yet within a few pages attacks comprehensive schools for 11-16-year-olds of a similar size as being unable to offer an adequate curriculum.

Despite the tendentious nature of the book, the author has collected, for those who wish to see it under one cover, many of the criticisms made of comprehensive schools, including several by sympathetic writers. In an early chapter he examines the comprehensive ideal as articulated by its supporters, and opposes the idea of "one society", seeing this as an unrealistic socialist vision. He argues against the concept of equality of opportunity being used to justify the comprehensive system, and believes that it could equally be employed as an endorsement of the 11-plus and selective schooling.

In two subsequent chapters on the organization of comprehensive schools he criticizes not only some of the general principles on which the schools are based, such as the use of mixed ability groups in the early years, or the pattern of tutor and year groups on which a great deal of guidance and pastoral care is founded, but also individual schools like Countesthorpe College which have tried to share decision-making with their pupils.

Perhaps a book as critical as this might have an astringent effect. After all, it is easy to welcome some new ideal and not ask oneself whether it is fulfilling the objectives and guiding principles on which it was founded. It would have found this book more credible, however, had it not overdone the demolition, and had more respect been shown for the evidence available. Too often quotations are taken out of context to justify Shaw's point of view, when an examination of the full text in the original shows that a different sense was intended. One of many such instances is his citation of the HMI secondary survey as evidence that pastoral care in schools is poor. He quotes HMI as saying "one sixth were assessed very favourably", which is the usual way they report their five category rating scales, but Shaw inserts the word "only" in his own text before the HMI quote "one sixth" which makes it seem as if they disapproved of what they saw. Inspection of the original HMI report, however, shows that their actual conclusion was, "The overwhelming majority of schools recognize their obligations in this matter and give much thought to them, particularly through their systems of pastoral

care." This book is an expression of the traditionalist's scepticism about change, and is in the same vein as the Black Papers and the writings of political groups opposed to comprehensive schools, like the Centre for Policy Studies, which it cites with approval. The quality of argument put forward is not in the same class as that propounded by other opponents of comprehensive schools like Geoffrey Bantock, and the rough handling of evidence reduces its effectiveness as a piece of polemic.

**E. C. Wragg**

E. C. Wragg is professor of education at the University of Exeter.

## Necessary change

**Excellence in Diversity: towards a new strategy for higher education** The Leverhulme Report Society for Research into Higher Education, £3.75  
ISBN 0 900868 99 6

**Response to Adversity: higher education in a harsh climate** by Gareth Williams and Tessa Blackstone  
Society for Research into Higher Education, £7.95  
ISBN 0 900868 92 9

**Excellence in Diversity** summarizes the first nine of ten studies organized by the Society for Research into Higher Education, financed by the Leverhulme Trust.

The programme of study was wide-ranging, considering most aspects of higher education. Each of the main proposals which arose in these programmes is neatly condensed and an overall perspective of the future development of higher education is presented in the form of a report. The proposals seem highly rational, but the main ones will, of course, raise hackles. The eventual elimination of the binary divide by gradually merging the activities

## School of prophets

**The Statutes of Sir Walter Mildmay for Emmanuel College** edited by Frank Stubbing  
Cambridge University Press, £25.00  
ISBN 0 521 24750 0

For years the translation of the statutes for Emmanuel College (1585) has gathered dust on the shelves of the college library. Extracts saw the light of day in Harry Porter's *Puritanism in Tudor England* (Macmillan, 1970). Now, at last, scholars have at their disposal a full and excellent translation of the statutes, accompanied by useful but not excessive annotation and a printing of the original Latin Statutes.

The importance of the statutes lies less in their originality – for they resembled those of other colleges, notably Christ's – than in their reinforcement of one of the most important functions of the contemporary universities. Historians such as Lawrence Stone have emphasized the extent to which the universities after the Reformation sought to meet the intellectual requirements of the ruling classes and thus to influence the mental processes of the country's governors. Valuable though this emphasis is, it has tended to distract attention from the function of the universities (and their constituent colleges) as seminaries of clergy.

Although at first glance it may seem that in this the colleges were simply continuing a medieval tradition, this was, in fact, far from the case. The medieval universities had educated the clerical elite – the dignitaries of both the regular and secular branches of the church. Few resident beneficed clergy were university graduates although the number was rising in the early sixteenth century. Foundations such as Corpus Christi College, Oxford, designed to produce educated parish clergy – represented a small move in

of the University Grants Committee and the National Advisory Body is bound to cause consternation in university circles; both because of a perceived higher status and on account of the potential resource implication. The elimination of over-specialization in the sixth form will not please the defenders of standards in all phases of education. Most controversial of all perhaps is the concept of the two-year first degree for all students, leading on to more specialist study or employment. Experience with the Dip HE has demonstrated the difficulties of mixing two-year less specialist degrees with three-year honours degrees. A pecking order is inevitable. So this study is demanding a major change in the structure of higher education.

In the tenth of these studies, *Response to Adversity*, Gareth Williams and Tessa Blackstone consider higher education's adjustment to a permanent state of resource shortage. Their main theme is the achievement of adaptation with static financing levels. Drawing heavily on recent work, and making useful comparisons with other countries, they review succinctly and clearly all of the pertinent issues, from student loans through to the impact of a binary divide.

They also review the implementation of the main report's recommendations. They point out that the attempt to achieve less specialization in the upper age ranges of English secondary schools is a sorry tale of bureaucratic incompetence, political interference, vested interests, and sets of proposals which fail to take into consideration the likelihood of generating adverse reactions. They also show that the notion of a two-year non-specialist degree will inevitably meet the same combination of obstacles. The fact that it should reduce unit costs, while offering many more places, as well as providing a better base for combining future study and employment is immaterial, if the opposition to its introduction cannot be overcome. The real task is to produce institutional managers who can not only think through solutions but actually implement them.

**W. F. Dennison**

W. F. Dennison is director of advanced studies in the school of education at the University of Newcastle.

the right direction. But the sixteenth and seventeenth-century universities (from Elizabeth to the Civil War) concentrated a much higher proportion of their energies on the education of the pastoral ministry. As Frank Stubbing observes, Mildmay saw that the purpose of the "new college was to supply a new generation of ministers" who would go out and preach.

The statutes of the college are, of course, a prescriptive rather than a descriptive document. Within twelve years of its foundation, Emmanuel was one of the most crowded colleges in Cambridge, popular with gentry sons who had no intention of entering the church as well as with clerical recruits of plebeian or clerical origin. This perhaps undermined the initial intention to be a "school of prophets" and certainly strained the tutorial resources of the college. At the university, the quality and character of a student's education depended in the last resort upon the conscientious behaviour of his tutor rather than upon the official rules and regulations. The fascinating if frustrating task before the educational historian remains that of discovering the extent to which prescribed behaviour was followed, modified or ignored.

Those who read diligently in these pages will emerge with a good appreciation of the manner in which education was seen by the moderate puritan as vital to the realization of a true ministry. They will also be treated to vivid glimpses of daily collegiate life. Among the many undesirable things that hinder the progress of them that be studious of good learning, no little harm is done by the frequent converse of the young upon idle matters; for besides the waste of time... there is engendered in youthful minds an evil habit by which they are most easily diverted from serious things to frivolities and foolhardiness.

**Rosemary O'Day**

Dr O'Day is lecturer in history at the Open University.



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## Universities continued

THE UNIVERSITY OF PAPUA NEW GUINEA  
Port Moresby

Applications are invited from suitably qualified persons for the following posts:

LECTURER/SENIOR LECTURER  
IN SERVICE ENGLISH  
(Department of Language)

The Service English Section of the Language Department is involved in the teaching of courses in English Language and Study Skills to students at Preliminary Year Level (pre-University entry) and also to first year undergraduates in all Faculties. At first year level there are separate courses for students in Arts/Education, Science and Law. These courses are team taught and designed to prepare students for University level work in their chosen disciplines.

Applicants should have postgraduate qualifications in Applied Linguistics or English for specific purposes, with experience of teaching English as a Second Language in Developing Countries. The successful applicant will also be expected to have expertise in at least two of the following areas: Reading, Testing, Materials Writing.

The successful applicant will be expected to commence work in January 1984 initially for a period of three years.

LECTURER/SENIOR LECTURER IN  
HISTORY OF SCIENCE & TECHNOLOGY

(Department of History)

Applicants should have a background in the history of European technology and scientific achievement. They should be ready to adapt their learning to suit the Melanesian context and willing to co-ordinate and teach the History of Science and Technology courses to Preliminary Year (pre-University entry) students. This course is a compulsory and basic foundation for University studies. Candidates should also be willing to teach in the same field at higher levels of the University programme.

TUTOR/LECTURER IN  
GEOGRAPHY/DEMOGRAPHY

(Department of Geography)

The successful applicant will be required to teach courses in cultural, population and introductory geography skills courses. Applicants should have a Master's degree or equivalent in Geography/Demography plus a working familiarity with Melanesian and the tropics.

SENIOR TECHNICAL OFFICER  
(MUSEUM)

(Biology Department)

The successful applicant will be responsible for the teaching and supervision of important research collections of Papua New Guinea animals. The applicant will also be responsible for the day to day liaison with the supervising architect during the construction of a new Natural Science Resource Centre. This post will also carry responsibilities for the day to day running of some laboratory classes.

Special emphasis will be given to an ability to supervise and train national technical staff in practical aspects of Museology.

Salary: Senior Lecturer K18,720 p.a. plus gratuity  
Lecturer Grade 2 K17,870 p.a. plus gratuity  
Lecturer Grade 1 K16,020 p.a. plus gratuity  
Senior Tutor Grade 1 K16,020 p.a. plus gratuity  
Senior Technical Officer K16,845 p.a. plus gratuity  
Tutor K13,700 p.a. plus gratuity

Other Conditions: The successful applicant will be offered a contract for a three-year appointment. The gratuity entitlement is based on 24% of salary earned and payable in instalments over a period of 24 months. In addition to the gratuity entitlement, the main benefits include: support for repatriation airfares for appointees and dependants; financial and from PNG; six weeks annual recurring personal effect to airfares available after each 18 months of continuous service; PNG of overseas salary continuation scheme to cover extended illness of disability.

Applications will be treated as strictly confidential and should include a full curriculum vitae, a recent small photograph and the names and addresses of three referees. In order to expedite the appointment procedure, applicants are advised to ask their referees to send confidential reports directly to the University without waiting to be contacted.

Applications should be forwarded to the Assistant Secretary (Staffing), University of Papua New Guinea, Box 320, October, 1983. Candidates should also send a copy of their applications to the Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF.

University of  
Oxford  
CAMDEN  
PROFESSORSHIP  
OF ANCIENT  
HISTORY

The electors intend to propose to the Senate a Professorship of Ancient History, which will be a full-time post, with a salary of £18,000 per annum. The successful candidate will be expected to teach and supervise students in the Department of Ancient History, and to undertake research in the field of ancient history. The electors intend to propose the post to the Senate in January 1984. Applications should be sent to the Secretary of the Senate, University of Oxford, 1, Wellington Square, Oxford OX1 2JH, by 15 October 1983. Further particulars may be obtained on request.

University of  
Oxford  
MERTON  
PROFESSORSHIP  
OF ENGLISH  
LANGUAGE

The electors intend to propose to the Senate a Professorship of English Language, which will be a full-time post, with a salary of £18,000 per annum. The successful candidate will be expected to teach and supervise students in the Department of English Language, and to undertake research in the field of English language. The electors intend to propose the post to the Senate in January 1984. Applications should be sent to the Secretary of the Senate, University of Oxford, 1, Wellington Square, Oxford OX1 2JH, by 15 October 1983. Further particulars may be obtained on request.

University of London  
University Entrance and School Examinations Council  
General Certificate of Education Examination  
The Council invites applications for the following Chief Examiner appointments:

JUNE 1984  
HINDI - ADVANCED AND ORDINARY LEVEL  
JUNE 1985  
HOME ECONOMICS - ADVANCED LEVEL  
GEOGRAPHY, SYLLABUS A - ORDINARY LEVEL  
JUNE 1986  
GERMAN - ADVANCED LEVEL  
MATHEMATICS - ADVANCED LEVEL  
SPANISH - ADVANCED LEVEL  
FRENCH - ORDINARY LEVEL  
SPANISH - ORDINARY LEVEL

Applicants should be graduates or hold appropriate qualifications and should be under 65 with five years recent teaching experience. Examining experience essential. Duties include setting question papers, advising on the award of grades and may include the supervision of a team of examiners.

For application forms and further details write to The Secretary, University Entrance and School Examinations Council, University of London, 65-72 Gower Street, London WC1E 6EE. Applicants should enclose a self-addressed, stamped envelope. Completed application forms should be returned by 17 October 1983. Previous applications for any of the above posts need not re-apply since their applications will be considered with any new ones received.

UNIVERSITY OF EDINBURGH  
DIRECTOR OF FINANCE

Applications are invited for the post of Director of Finance.

The Director of Finance will be a member of the Senior Administrative team called upon to advise on general policy matters in the University. Although responsible to the Secretary to the University, the Director of Finance will be expected to play the leading role in financial planning and control and will have close day-to-day contact with the Principal.

Whilst experience in University Administration could be an advantage, the work of the Director of Finance could be an experience in other fields, such as Business or Industry, could be equally valuable. It is expected that the successful applicant will have suitable accountancy experience and preferably an accounting qualification.

The salary will be on the Administrative Grade IV Salary Scale (present minimum £17,276 per annum), together with superannuation benefits.

Further particulars may be obtained from the undersigned, with whom applications (ten copies) giving the names of three referees, should be lodged not later than 14th October, 1983. Please quote reference: 4011.

A. M. Currie  
Secretary to the University  
Old College, South Bridge  
Edinburgh EH8 9YL

UNIVERSITY OF EAST ANGLIA  
LECTURER  
IN EDUCATION

Applications are invited for the above post in the School of Education from 1st January 1984 or as soon as possible thereafter. The successful applicant will be responsible for the development of the relationship between Information Technology and Curriculum Practice through teaching and research. Salary on scale £7,180-£14,125 p.a. plus USS benefits.

Applicants (three copies) giving full particulars of age, qualifications and experience, together with the names and addresses of three referees, should be sent to the Secretary to the University of East Anglia, Norwich NR4 7TA (Tel: 0693 8161). Applications should be received not later than 21st October 1983. No forms of applications are issued.

University of  
Bradford  
LECTURESHIP IN  
PHARMACEUTICAL  
TECHNOLOGY

Applications are invited from suitably qualified persons for a full-time post in the Department of Pharmaceutical Technology. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of pharmaceutical technology. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University of Bradford, Bradford BD9 4JT, by 15 October 1983. Further particulars may be obtained on request.

University of  
Southampton  
ENGINEERING MATERIALS  
A RESEARCH  
FELLOWSHIP

Is available from 1st October, or as soon as possible thereafter, in the Sub-Department of Engineering Materials to conduct research on the corrosion casting of aluminium foundry alloys. The research is supported by S.E.R.C. for a three year period at an initial salary of £7,630 p.a.

Candidates should have a degree in Metallurgy, Materials Science or a related subject and relevant research experience in melting and casting processes. Applications (in duplicate) giving a brief curriculum vitae and the names of two referees to D. A. S. Copland, The University, Southampton SO9 4RN, quoting reference number 200/R.

University of the  
Witwatersrand,  
Johannesburg  
Department of African  
Languages  
CHAIR OF AFRICAN  
LANGUAGES

Applications are invited from suitably qualified persons for a full-time post in the Department of African Languages. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of African languages. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University of the Witwatersrand, Johannesburg 2000, by 15 October 1983. Further particulars may be obtained on request.

University of  
London  
Addition Research Unit  
STATISTICIAN

The Addition Research Unit requires a Statistician to conduct research in the field of addition. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of addition. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University of London, London WC1E 6EE, by 15 October 1983. Further particulars may be obtained on request.

Victoria University of  
Wellington  
New Zealand  
Department of  
Accountancy  
SENIOR LECTURER  
AND LECTURERS  
(2 POSTS)

Appointments are available for the above posts in the Department of Accountancy in the following areas:

TAXATION AND/OR FINANCIAL ACCOUNTANCY AND/OR COMMERCIAL LAW

Applicants should have an advanced degree in accountancy or commerce, and should have at least five years' experience in teaching and research in the relevant field. They should also have a good knowledge of the New Zealand tax system and commercial law. Applications should be sent to the Secretary of the Department, Victoria University of Wellington, P.O. Box 600, Wellington, New Zealand, by 15 October 1983. Further particulars may be obtained on request.

Salary range for Senior Lecturer: NZ\$55,000 to NZ\$65,000 per annum. For Lecturer: NZ\$45,000 to NZ\$55,000 per annum. Superannuation benefits are available.

Conditions of Appointment and method of application are available from the Administrative Assistant, Victoria University of Wellington, P.O. Box 600, Wellington, New Zealand. Applications should be sent to the Secretary of the Department, Victoria University of Wellington, P.O. Box 600, Wellington, New Zealand, by 15 October 1983. Further particulars may be obtained on request.

University of  
Hong Kong  
LECTURESHIP IN  
URBAN STUDIES/  
GEOGRAPHY

Applications are invited for a full-time post in the Department of Urban Studies and Geography. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of urban studies and geography. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University of Hong Kong, Pokfulam, Hong Kong, by 15 October 1983. Further particulars may be obtained on request.

Applicants should have a degree in Urban Studies, Geography, or a related subject, and should have at least five years' experience in teaching and research in the relevant field. They should also have a good knowledge of the Hong Kong urban environment. Applications should be sent to the Secretary of the Department, University of Hong Kong, Pokfulam, Hong Kong, by 15 October 1983. Further particulars may be obtained on request.

Further particulars and application forms are available from the Secretary of the Department, University of Hong Kong, Pokfulam, Hong Kong. Applications should be sent to the Secretary of the Department, University of Hong Kong, Pokfulam, Hong Kong, by 15 October 1983. Further particulars may be obtained on request.

University of  
Bradford  
LECTURER IN  
OFFSHORE  
RESOURCE  
ENGINEERING

Applications are invited from suitably qualified persons for a full-time post in the Department of Offshore Resource Engineering. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of offshore resource engineering. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University of Bradford, Bradford BD9 4JT, by 15 October 1983. Further particulars may be obtained on request.

Applicants should have a degree in Offshore Resource Engineering, or a related subject, and should have at least five years' experience in teaching and research in the relevant field. They should also have a good knowledge of the offshore resource engineering field. Applications should be sent to the Secretary of the Department, University of Bradford, Bradford BD9 4JT, by 15 October 1983. Further particulars may be obtained on request.

Further particulars and application forms are available from the Secretary of the Department, University of Bradford, Bradford BD9 4JT. Applications should be sent to the Secretary of the Department, University of Bradford, Bradford BD9 4JT, by 15 October 1983. Further particulars may be obtained on request.

University  
College of  
Swansea  
Fixed-Term Lectures

Applications are invited for the above posts in the Department of Chemistry. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of chemistry. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University College of Swansea, Swansea SA2 8PP, by 15 October 1983. Further particulars may be obtained on request.

Applicants should have a degree in Chemistry, or a related subject, and should have at least five years' experience in teaching and research in the relevant field. They should also have a good knowledge of the Swansea chemistry field. Applications should be sent to the Secretary of the Department, University College of Swansea, Swansea SA2 8PP, by 15 October 1983. Further particulars may be obtained on request.

Further particulars and application forms are available from the Secretary of the Department, University College of Swansea, Swansea SA2 8PP. Applications should be sent to the Secretary of the Department, University College of Swansea, Swansea SA2 8PP, by 15 October 1983. Further particulars may be obtained on request.

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## Universities continued

University of  
Glasgow  
GARDINER CHAIR  
OF BIOCHEMISTRY

Applications are invited for the above post in the Department of Biochemistry. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of biochemistry. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University of Glasgow, Glasgow G12 8QQ, by 15 October 1983. Further particulars may be obtained on request.

Applicants should have a degree in Biochemistry, or a related subject, and should have at least five years' experience in teaching and research in the relevant field. They should also have a good knowledge of the Glasgow biochemistry field. Applications should be sent to the Secretary of the Department, University of Glasgow, Glasgow G12 8QQ, by 15 October 1983. Further particulars may be obtained on request.

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The University of  
Leeds  
Department of  
Chinese Studies  
PREDOCTORAL  
RESEARCH  
ASSISTANT

Applications are invited for the above post in the Department of Chinese Studies. The successful candidate will be expected to teach and supervise students in the Department, and to undertake research in the field of Chinese studies. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Department, University of Leeds, Leeds LS2 9JT, by 15 October 1983. Further particulars may be obtained on request.

Applicants should have a degree in Chinese Studies, or a related subject, and should have at least five years' experience in teaching and research in the relevant field. They should also have a good knowledge of the Leeds Chinese studies field. Applications should be sent to the Secretary of the Department, University of Leeds, Leeds LS2 9JT, by 15 October 1983. Further particulars may be obtained on request.

Further particulars and application forms are available from the Secretary of the Department, University of Leeds, Leeds LS2 9JT. Applications should be sent to the Secretary of the Department, University of Leeds, Leeds LS2 9JT, by 15 October 1983. Further particulars may be obtained on request.

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University of  
Oxford  
CHICHELE  
PROFESSORSHIP  
OF MEDIEVAL  
HISTORY

The electors intend to propose to the Senate a Professorship of Medieval History, which will be a full-time post, with a salary of £18,000 per annum. The successful candidate will be expected to teach and supervise students in the Department of Medieval History, and to undertake research in the field of medieval history. The post is available from 1st January 1984. Applications should be sent to the Secretary of the Senate, University of Oxford, 1, Wellington Square, Oxford OX1 2JH, by 15 October 1983. Further particulars may be obtained on request.

Applicants should have a degree in Medieval History, or a related subject, and should have at least five years' experience in teaching and research in the relevant field. They should also have a good knowledge of the Oxford medieval history field. Applications should be sent to the Secretary of the Senate, University of Oxford, 1, Wellington Square, Oxford OX1 2JH, by 15 October 1983. Further particulars may be obtained on request.

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## NANYANG TECHNOLOGICAL INSTITUTE

### CAREER OPPORTUNITIES IN SINGAPORE FOR ENGINEERING PROFESSIONALS

Career opportunities exist in Singapore for engineering professionals who like teaching and are looking for challenging jobs in tertiary institutions.

The Nanyang Technological Institute, fully supported by the Government of Singapore, offers engineering degree courses with an emphasis on engineering applications. It aims at producing practice-oriented engineers. The Institute is one of the two institutions in Singapore that provide engineering education at the university level.

There are vacancies in the Institute's three schools of engineering. Candidates specialising in the following areas are particularly needed:

#### Civil & Structural Engineering

Structural and construction engineering  
Water resources and environmental engineering  
Geotechnical and transportation engineering  
Engineering mathematics and computing  
Engineering economics and accounting  
Surveying and mapping

#### Electrical & Electronic Engineering

Electronics/communications design  
Digital control systems  
Control and instrumentation  
Computer engineering software and hardware  
Data base/data communication technology  
Computer aided design, manufacture and testing

#### Mechanical & Production Engineering

Machine technology  
Engineering production  
Mechanical design  
Mechanical engineering

#### QUALIFICATIONS

Candidates should have —  
(a) Higher degrees in relevant fields of engineering, and  
(b) Sound professional/teaching experience in engineering.

ANNUAL SALARIES	from	to
Professor	S\$98,830	S\$130,131
Associate Professor	S\$79,734	S\$105,822
Senior Lecturer	S\$63,227	S\$ 81,017
Lecturer	S\$48,942	S\$ 65,787

(£12-893.20)

The level of appointment and the point of entry will depend on candidates' qualifications and experience.

In addition to the salary the Institute contributes 23% of the staff member's monthly salary towards the Central Provident Fund Scheme to which the staff member also contributes 22% of his monthly salary subject to a maximum of S\$890. The amount standing to the credit of the staff, can be withdrawn when he reaches the age of 55 years or when he leaves Singapore/Malaysia permanently. The sum withdrawn is income tax exempt.

The Institute provides housing at a highly subsidised rate. Other benefits include car loan, education allowance, setting-in allowance, medical benefits, annual leave and passage allowance.

The Institute encourages its staff members to undertake outside consulting work of a specialist nature. Staff members are permitted to earn and retain such consultation fees up to 50% of their annual gross salaries.

Candidates wishing to be considered should write to —

The Registrar  
NANYANG TECHNOLOGICAL INSTITUTE  
Upper Jurong Road, Singapore 2263

giving their curriculum vitae and the names and addresses of three referees.

## UNIVERSITY OF CAPE TOWN Department of Geology Temporary Teaching Assistant

Applications are invited for the above post in the Department of Geology for appointment from 1 January 1984 or no later than 4 February.

The successful applicant will be responsible for teaching on introductory semester courses in Geology to Civil Engineering students and will assist with other undergraduate problems and field trips. The successful applicant will be expected to have a minimum of a BSc in Geology.

The post is suitable for an honours graduate (or MSc or PhD) who also wishes to pursue research interests in Geology. The appointment is for one year but can be renewed and is suitable for a candidate who wishes to register for an MSc or PhD degree in the Department. The salary is in the range R2 335 to R10 317 per annum depending on qualifications and experience.

Applications, in writing, with a full curriculum vitae and grading of last two honours examinations, must be made to Professor A. H. Hall, Head of Department of Geology, University of Cape Town, Private Bag, Rondebosch, 7700, South Africa. The closing date for applications is 31 October 1983.

The University's policy is not to discriminate on the grounds of race, colour or religion.

Further information on the implementation of this policy is obtainable on request.

## AUSTRALIA The University of Wollongong

Equality of employment opportunity is University policy. Applications are invited from suitably qualified and experienced persons for the following posts. The University reserves the right to fill any advertised position by invitation.

### DEPARTMENT OF COMPUTING SCIENCE LECTURER OR SENIOR LECTURER (Tenurable or Limited Term position)

Preference will be given to applicants with experience in one or more of the following fields: the application of predicate calculus to computer programming; database theory, development and application; operating systems; graphics.  
The Computing Science Laboratory contains 80 terminals (including two Perkins Elmer 320 computers under UNIX). The systems are closely coupled via dual-port disks and locally connected via I/O ports. The central computer is a SPERRY 1100/80. Both systems are available for teaching and research. A microcomputer, a robotics and a computer-aided learning laboratory are also available.

Appointment may be made either to a tenurable position or to a limited term position for 2 to 4 years.

### DEPARTMENT OF PSYCHOLOGY LECTURER OR SENIOR LECTURER (Tenurable position 1981/82)

Clinical, community or counselling psychologists are invited to apply. The successful applicant will teach and supervise students in psychology, personality and/or social psychology and graduate (M.A. in Applied Psychology) as well as undertake and supervise research in experience-based psychology.

### LECTURER (Tenurable position 1981/82)

Psychologists who have interests in child and/or adolescent psychology and psychological assessment and research are invited to apply. The successful applicant will teach and supervise students in psychology, personality and/or social psychology and graduate (M.A. in Applied Psychology) as well as undertake and supervise research in experience-based psychology.

For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an appointment at Senior Lecturer level if the applicant is considered to be of a level to justify such an appointment. For positions advertised as Tenurable or Limited Term, applicants are requested to specify the level for which the application is made. The University may make an appointment at Senior Lecturer level if the applicant is considered to be of a level to justify such an appointment.

Applications, containing full details of qualifications, employment history, research interests, publications list, and the names and addresses of three referees, should reach the University Secretary, The University of Wollongong, P.O. Box 1144, Wollongong, N.S.W. 2500 Australia, by 1st November 1983. Please mark envelope 'Confidential - Appointment'.

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## THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY Sydney, Australia Equal Employment Opportunity in Institute Policy PLANNING OFFICER

Applications are invited for appointment to the position of Planning Officer, The New South Wales Institute of Technology. This is a new post established to coordinate the planning and development of the Institute. The successful applicant will be expected to play a significant role in establishing a climate in which this plan can be developed by co-operative action.

The Planning Officer, while responsible to the Vice President and through the Vice President to Council, is expected to work independently in achieving the required objectives. It is expected that the appointee will be the focal point for the initiation and development of the corporate plan which will at all levels, with students and staff, and in the production of planning material.

Applicants should hold a degree and preferably a postgraduate qualification with considerable experience in academic, institutional or corporate planning. Alternatively, applicants should have extensive experience in academic work and a demonstrated interest in planning. Another essential requirement is a background in data processing.

Conditions of Employment  
Salary for this position will be in the range of \$43,960-\$44,170. Fees and a contribution toward removal expenses are provided for overseas appointees. A Housing Loan Scheme is also available through the Institute Bankers.

Applications should include full details of academic and professional work. The names and addresses of three referees, from whom confidential reports may be obtained, should be included. Please quote reference number 83/113.

Applications close on 21st October, 1983 and should be forwarded to:  
The Director  
N.S.W. Government Office  
86 The Strand  
London WC2N 8LZ

Printed information about conditions of employment and related matters is also available.

## AUSTRALIA ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY LIMITED

### PRINCIPAL LECTURER IN ADMINISTRATION

#### DEPARTMENT OF ADMINISTRATIVE STUDIES

The Department is seeking a senior academic staff member who will have responsibility for the oversight of undergraduate and graduate programmes in business administration, management, public administration, local government and organisational development. A person with the ability to lead and develop and participate in team activities is being sought. The appointee will make a strong contribution to academic development and applied consultancy programmes. Applicants should possess a higher degree in a relevant discipline and have significant experience in administration.

The position is required.  
Salary: \$43,960 per annum.  
Position description should be obtained from Staff Branch, RMIT Ltd, Box 2476/C, Melbourne, 3001, Australia.

Applications should be sent to the Staff Officer by 21st October, 1983.

## GARYOUNIS UNIVERSITY BENGHAZI, LIBYA A.R.

### TEACHING POSTS

Required for the Academic year starting October, 1983.

#### DENTISTRY

All specialists, in particular Restorative Dentistry (conservative Dentistry); Crown and Bridge; Endodontics; Prosthodontics and Periodontics.  
Apply with C.V.

#### COMPUTER SCIENCE

Applications are invited for Teaching position starting September 1983.

Applicants must have Ph.D.; commitment to teaching research in computer science. All areas of specialisation in computer science will be considered.

Salary Scale 6265 to 9720 L.D. p.a. depending on qualifications and experience.

Send resume with names of three referees.

#### ENGINEERING

Teaching positions in HE, IE, and ME, departments at the University in CLA; SIC; LIE, Applied Statistics; Applied O R and Manufacturing Engineering. Candidates with P.T.E. Are preferred programme (120 Students) covers all Areas of IE with newly possible of financing.

PO T PO IT ON will be filled upon availability of accepted candidates.  
Salary Scale 6265-9720 L.D. Apply with C.V. and names of three referees.

Approximate current rate of exchange 1 L.D. = £2.15.

Fringe Benefits Include:—

Generous Clinical Allowance (Dentistry)

Free Accommodation plus furniture allowance.

Free Air travel for employee and family.

2 months salary as a bonus for each year of service.

Free leave travel for employee and family.

#### ZOOLOGY DEPARTMENT

Applications are invited from suitably qualified candidates for the following posts in:—

— Chordata Biology (Ichthyology; HA Herpetology;

— Ornithology; Mammalogy.

— Invertebrate Biology and Parasitology.

— Cell Biology, Molecular and Radiation Biology.

— Insect Physiology; Insect Ecology; Insect Toxicology; Medical and Veterinary Entomology.

Appointments are for two years initially, with possibility of extension by mutual agreement. Shorter periods may be considered to accommodate senior academics.

Benefits include:—

Transportation costs for appointee and family.

contribution to living expenses; terminal pay gratuity, etc.

Salary Scale:—

Professor L.D. 8840; Associate Prof. L.D. 7600

Assistant Prof. L.D. 6840; Lecturer L.D. 6240

Current rate of Exchange 1 L.D. = U.S. \$3.37.

The Department is particularly interested in those who wish to contribute to a strong teaching unit at under and

substantial way.

Benghazi is located on the Mediterranean coast, and has a pleasant climate.

Applications with C.V. and names of three referees.

Appointments may be made at any time, particularly to those available immediately.

## ENGLISH LANGUAGE AND LITERATURE

Vacancies for teaching staff, Department of English Language and Literature starting September, 1983.

Applicants holding M.A., or Ph.D., with university teaching experience will be preferred.

Salary scales:

Professor 8840 L.D.

Associate Professor 7600 L.D.

Assistant Professor 6840 L.D.

Lecturer 6240 L.D.

Assistant Lecturer 5285 L.D.

Other benefits include:—

Free return air tickets; 45 days paid leave annually; Free medical care; Furnished Accommodation; Two months salary for each year of service thereafter; 20% of air tickets real baggage allowance on first arrival and final departure.

Applications with non-returnable copies of qualifications and experience, together with names of three referees.

Please apply to

The Cultural Attache

88 Prince's Gate

London, SW7.

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## Librarians

### University of Newcastle Upon Tyne Department of Fine Art Senior Library Assistant

Applications are invited for the above post in the Department of Fine Art, University of Newcastle Upon Tyne. The successful applicant will be responsible for the day-to-day running of the library and for the care and maintenance of the collection.

The post is suitable for an honours graduate (or MSc or PhD) who also wishes to pursue research interests in Fine Art. The appointment is for one year but can be renewed and is suitable for a candidate who wishes to register for an MSc or PhD degree in the Department. The salary is in the range £2 335 to £10 317 per annum depending on qualifications and experience.

Applications, in writing, with a full curriculum vitae and grading of last two honours examinations, must be made to Professor A. H. Hall, Head of Department of Geology, University of Cape Town, Private Bag, Rondebosch, 7700, South Africa. The closing date for applications is 31 October 1983.

The University's policy is not to discriminate on the grounds of race, colour or religion.

Further information on the implementation of this policy is obtainable on request.

## REMINDER

Copy for Classified Advertisements in the THES should arrive not later than 10am Monday preceding publication

## OVERSEAS CONTINUED

## NGEE ANN POLYTECHNIC Republic of Singapore

Invites applications from suitably qualified persons for appointment as Lecturing Staff in the following Departments/Centres:

- Building
- Electrical and Electronic Engineering
- Mechanical Engineering
- Shipbuilding and Repair Technology
- Mathematics and Science

#### The Institution

Ngee Ann Polytechnic is a premier Government Polytechnic offering diploma courses equivalent to HND standard. The Polytechnic has a student enrolment of 4,900 and a full-time academic staff strength of 308 in the current academic year. The student population is expected to increase to 8,000 by 1986 with a proportionate increase in staff strength. The current annual operating budget of \$16.5m is expected to be increased to \$70m. The medium of instruction is English.

#### Qualifications

Candidates must have a good and recognised University Degree and/or professional qualifications in a relevant field and have at least two years relevant industrial/teaching experience. However, preference will be given to candidates with experience/expertise in the following areas:

- Building**  
Electrical Engineering, Building Services and Environmental Engineering.
- Electrical and Electronic Engineering**  
(1) Power & Industrial Electronics  
(2) Telecommunication (Digital Communication & Microwave Technology)  
(3) Computer Control & Instrumentation  
(4) Robotics & Automation  
(5) Computer/Microprocessor Technology & Application  
(6) Electronic Measurement
- Mechanical Engineering**  
(1) Computerised Machining  
(2) Robotics  
(3) CAD/CAM  
(4) Instrumentation & Control  
(5) Refrigeration & Air-Conditioning  
(6) Computer Application  
(7) Engineering System Design
- Shipbuilding and Repair Technology**  
Towing Tanks, Offshore Engineering, Shipbuilding/Ship Design and Marine Electro-technology.
- Mathematics and Science**  
Professional computer experience together with experience in teaching and research in Computer Science.

#### Gross Annual Emoluments

Gross Annual Emoluments range from S\$27,113-S\$94,828.

(The present rate of exchange is £1 = S\$3.23)

The above figures include a current 13-month allowance and a 22% employer's contribution to the Singapore Central Provident Fund.

The levels of appointment and points of entry into the above salary range will be dependent upon qualifications and experience. Applicants need only apply for a Lecturing Appointment, giving details of qualifications and experience, and the Polytechnic will decide on final offer after interview.

#### Terms and Conditions of Service

Singaporeans and Malaysians will be offered appointments on local terms. Other successful candidates will be appointed on contract of three years' duration. Successful applicants will also be eligible for medical/dental benefits, membership of Central Provident Fund, free air passages for employee, wife and children, children's education allowance, housing allowance, commuted board and lodging allowance, baggage allowance, etc. Applicants will be supplied with details of terms and conditions of service if they are shortlisted for interview.

#### Applications

For application forms, please write to the address shown below enclosing a stamped self-addressed envelope or call personally to the:

Singapore High Commission, 5 Cheesha Street, London SW1, United Kingdom.

Applications close on 10 days after advertisement.

## Miscellaneous

## CLWYD COUNTY COUNCIL

### EDUCATION DEPARTMENT

The Clwyd/MBC Technical and Vocational Education Initiative Project involves the secondary schools (which are offering the new curriculum options with effect from September, 1983) and a

### TECHNICAL VOCATIONAL CENTRE

located at Bodafwyddon Castle situated near the A55 Highway, 5 miles from Rhyl. It is proposed to open the Centre as a support to the Project with effect from September, 1984 and the Authority is now seeking applications for the post of

### HEAD of the

Technical/Vocational Centre

Salary: Burnham Head Group IX or equivalent, i.e. £15,027-£15,281.

Starting date: 1st January, 1984 or as soon as possible thereafter.

Conditions of Service: N.J.C.

For this post the Authority is seeking to appoint an experienced teacher/lecturer, ideally with some commercial/industrial experience whose subject discipline is likely to be within the fields of Business, Studies, Information Services, Computing, Micro-electronics, Design Technology and Media/Information.

Previous applicants for this post will be contacted individually.

New applicants will receive an application form, a job description and details of the Centre from the undersigned. Completed application forms should be submitted by 17th October 1983.

JOHN HOWARD DAVIES  
Director of Education

## MATHEMATICS/SCIENCE TEACHERS

SAUDI ARABIA  
£15,000 plus

One of the major priorities of Aramco, the world's largest oil producing company, is the continuing education and development of its Saudi Arabian Workforce, who will eventually become the Engineers and Technicians of the future.

You will have at least 4 years' teaching experience and be qualified to teach HNC/HND/BSc and have experience teaching foreign students within the age range of 14-18+ years.

For the Maths teachers a knowledge of modern maths concepts, plane, solid and analytical geometry, advanced algebra, trigonometry and calculus is essential. Science teachers should have a working knowledge of modern instructional methodology.

The benefits provided are excellent and in addition to attractive salaries, include regular U.K. leave with

company paid air-fares, open ended employment contracts offering job security, usual overseas tax allowances, comprehensive medical care and excellent sport and recreational facilities. A valid U.K. driving licence is essential.

Please write for an application form, quoting reference 8873/TITBS to John Nicholson, ARA International, 17-19 Maddox Street, London W1R 0BY. Tel: 01-629 2356 or 01-491 8013 (ansaphone).



partners in progress

## FACULTY OF ARTS University of Garyounis

Applications are invited

for

Teaching English Language

Qualifications: MA with TEFL or Linguistics, with TEFL

Salary Scale: (one Libyan Dinar - £2.00 approx.)

Lecturer - L.D. 6,240 pa

Assistant Lecturer - L.D. 5,265 pa

Other Benefits: Furniture allowance; free medical care

locally; annual free return air travel for staff

and family, up to 4 children under 18; two

years' contract (first year on probation);

end of contract bonus (2 months salary for

each year of service); Summer holiday

(months of July and August).

The University provides suitable

accommodation for single and married staff

members.

Apply with CV and names of three referees to:

Cultural Affairs

58 Prince's Gate

London SW7

Tel: 01-589 5235 (3 lines)

## University of The Witwatersrand Johannesburg

Department of Geography  
and Environmental Science

JUNIOR/ASSISTANT

LECTURER IN

GEOMORPHOLOGY

Applications are invited

from suitably qualified

persons for the post of

Junior/Assistant



# Don'sdiary

Monday

A quiet start: no mail as yet, the college postperson is off sick and the senior administrative officer who is covering for her is in a meeting. Memo to self, don't learn to drive. I fend off three reps of careers publications who want us to advertise with them - I explain about the minimal budget.

I agree to one, who wants copy by the weekend. I explain about three week delays pending local authority approval of the spending of public money. They ring off saying it has been nice to talk to me! I am gradually beginning to tell apart their ever so bright home counties voices. At least in this job I've learned to say "no".

I get a panic - crisis, dash, leave everything call from a colleague at our information shop in the city library. The display of student work accompanying our advice-giving activities has been vandalized. Three chocolate rabbits contributed by the school of bakery have had their ears neatly bitten off. Someone is going to be very sick on cooking chocolate and confectioner's vanilla. I go down to the library and remove the remains, which are attracting the kind of publicity we don't need.

Tuesday

Bedlam: we've organized a phone-in follow-up to an ad in the local press urging mature women to prepare for re-entry to employment. Unfortunately the extension number we gave has since been disconnected. The new one not yet connected and this morning the switchboard operator has gone sick. I take some of her calls and see why. I perfect a mollifying tone of voice.

Must want identifying T-shirts for a Barbican performance. Can the public relations budget spare £40? Three saplings on the approach road have been snapped off by the wind or vandals and need to be banded or replaced quickly.

I consider the demise of a goldfish on college premises (being harboured for an overseas student obliged to make a sudden return journey home) - not really worthy of a press release. Seven hundred copies of the latest issue of the college newsletter require stapling prior to distribution.

Extension work on the college library has unfortunately covered up the only sign identifying the neighbouring teaching block and what am I going to do about it? As it's the week prior to enrolment, I advance it to the top of my list of "things to do yesterday" and dash off to local radio to do an item on educational opportunities for adults in the city this autumn.

I am mistakenly identified as two other people, but eventually go live and of the list I've rehearsed on the way there manage to mention basic computing, Punjabi, beekeeping and astrology. I come away frustrated as usual only being given three minutes on the air.

Wednesday

News of student successes at degree level comes in the mail, a useful feedback service from higher education. I recognize one I taught at A level before I accepted this particular staff development opportunity. I dimly recall thinking it would be nice to press lunches and telly appearances. Huh!

I check a story out about an A level success - three B grades in sciences in under two years of study after a shaky start elsewhere and going on to a degree course in pharmacy. I notice in passing the number of female students who've done well in behavioural sciences.

More crisis phone calls - an entire set of exhibition materials has gone missing.

ing. I pass that problem on, having learned from a colleague the useful sentence: "I can leave that with you now, can I?" Someone points out inaccuracies in the prospectus, one of them my own course. I forbear to advocate a more sophisticated system of proof reading, knowing I'll get the job.

A request to talk to a Youth Training Scheme induction course is accepted with alacrity until I remember I shall be at the staff induction course, enrolling at the staff students and advising at the information shop at that time already. Whoever said time was infinitely expandable wasn't a PR officer!

Thursday

A parent calls in to thank us for helping her daughter find an alternative to university after failing A levels. I commend in turn the city's adult advisory service and careers officers who have been working with us. A staff member compliments the special adult education newspaper we put out this summer.

While I am basking in this admittedly reflected glory one of the departmental clerks reports an irate phone call from a firm's training officer, unable to find someone he needed during the holidays. He told us that if we were in business we wouldn't be. I have to agree, but then we aren't; or are we?

I hide from the telephone and spend the rest of the day writing the item on publicity and public relations for the annual report, depicting our old-fashioned supermarket orientation and urging greater involvement by all concerned parties. Staff development never knew a dull moment!

Friday

Perhaps this will be a quieter day? Time to check over various items for the new college news sheet - are the latest Further Education Unit documents in the library yet for A claim? What exactly was the award the business studies people won for the design of their certificate of management studies course?

I must thank those who staffed the information shops in the holidays, provided the display items and helped put up the posters. I insert an item asking for volunteers to report the affairs of their departments with a view to news sheet and press coverage.

I go through the folder of follow-up queries from the information shops: one of the pictures in the fine art section of the display of student work features a man and his dog sitting on a bench - the man has seen it, recognized himself and wants to buy it. Must make something of that.

Five pm. A flurry of late requests: can we take a couple of school pupils on a period of study experience in art and design? Will I write up details of our open access courses for an equal opportunities group? Please, can the staff car park be newly signposted and how about ringing the local radio station to push low-enrolling courses?

I am about to start on all this when someone asks when I intend to update the staff handbook. I decide Monday will do for the brave new world, put everything in my brief case and go home well intentioned, noting with secret pleasure our enrolment posters on the local railway stations - and musing on staff development opportunities.

Anne Castling

The author is public relations officer at Newcastle College of Arts and Technology.

My children have recently become masters at mocking a group, which they call "yah" people. I am uncertain of the origin of this term but assume that it derives from the fact that members of this group say "yah" instead of "yes". They are further characterized, according to my children and their friends, by wearing leather-thonged sandals, eating lentils, being "into" psychotherapy and following occupations such as social work. If they have small children they dress them in dungarees with Cam-paiga for Nuclear Disarmament and anti-nuclear power badges pinned to them if they are old enough - they were hippies in the golden days of the late 1960s. "You were a hippy once," my children accuse me in a tone which indicates a mixture of poking fun and derision. "Not exactly," I reply defensively, to which they draw attention to the moth-eaten, smelly, embroidered red velvet, Bedouin caftan still hanging in my cupboard. (Perhaps my reluctance to throw it away is because it does symbolize an era.) But while accusing me of a hippy past, which to them is as past as crew cuts, boned bras and white weddings were to my generation, they have not yet designated me a yah person.

I fear it may happen soon as the yah tendencies, which are already present, become more manifest. Secretly soaking pulses in the middle of the night, I wonder if I dare reveal that I have resorted to homeopathic remedies, tried acupuncture and thought about psychotherapy. There are plenty of Indian shirts and thonged sandals in my wardrobe and to my daughter's disgust I bought another pair of these sandals only a few weeks ago. Vegetarian restaurants have growing appeal and being forced to give up my yoga class as a result of a change of job has led to a permanent staff need.

Temporary relief has been found courtesy of the Railway Workers Sanatorium in Hangzhou where I was given a traditional Chinese neck massage. I am now looking for a Chinese masseur in London. (Genuine letters only please.) Though the sight of a plate of carefully weighed dried lizards, centipedes and cicadas ready to be ground up and taken as powder or added to wine did cast some doubts in my mind as to the value of all Chinese

essential embrocation which according to the blurb is "efficacious for mosquito bites, insect stings, inflammation, itches, lumbago, sore shoulders, and slight burns" as well as having "an effect in tranquillization and shaking off cold ... and relieving isolation". And all contained in one

## Reminiscences and regrets, post-Robbins



Ian Wigglesworth

I responded with some trepidation to the invitation to contribute to this column, along with Keith Hampson and Jack Straw. Although I have kept an interest in education during almost ten years in the House I have not been involved at the sharp end since leaving the National Union of Teachers in the late 1960s.

However, I take some consolation from the fact that both my fellow higher educational and political ex-penitents at the same time and in the same environment as myself. Indeed student-arena of the 1960s not dissimilar to those we are still fighting from. But I am not only in that respect that I found that I was in familiar company. When I picked up *THE THES* during

## The ethnic life of the Yah people



Tessa Blackstone

little bottle, so that those who travel with half the contents of their medicine cupboards could greatly lighten their suitcases with this alternative.

Each evening ordinary English food of the meat and two veg and apple tart variety is another characteristic. *Wok* sales are booming in Hampstead and all kinds of Indian spices can be found in smart grocers in small country towns to serve the needs of those with country cottages, which the better off members of the yah group frequently possess. Thus the relish with which I found myself attacking every conceivable Chinese dish put in front of me when visiting China recently was yet another sign of moving towards yah status.

One memorable meal revealed, however, that conversion is not yet complete. After the usual Chinese *hors d'oeuvre* picked with chopsticks from a wide range of dishes in the centre of the table mostly good, though I drew the line at salty eggs and pickled eggs, the main courses began to be served. Nothing remarkable for two or three rounds. Then came a dish looking like

fried vegetables in batter. The assumption that this was what it was proved false. Injudiciously taking a large bite, there followed a horrible crunching noise and a rapid attempt to eject it without actually spitting it out, a difficult feat to perform for those who are as cack-handed as I am with

August to familiarize myself again with what was going on in common rooms around the country and in the corridors of Elizabeth House what should I find but an exhaustive analysis by Peter Scott of the achievements of Robbins. This was where I came in. How well I remember that report. My own dog-eared copy, carried around the country stands on the shelf, although the reports many years ago. I don't repeat any of those conference speeches. The momentum given to the expansion of student places was enormous. To have expanded from 97,000 full-time places in 1957/58 to 309,000 at the latest count is quite an achievement.

Not surprisingly (particularly in view of Peter Scott's comment that Robbins' "background of culture and social reform" underwent a social-democratic expansion. It was the incorporation, to some extent, of greater equality within the traditional goals of the university. As Scott wrote: "The thrust to equality improved access and faster expansion."

It is surprising that Mrs Thatcher's Conservative have not pursued the reverse arguments more vigorously to justify their cuts in higher education expenditure. No doubt this is in large measure because the style, status and standards of the new universities, combined with their older brethren have over higher education.

Maybe we should be thankful for that in the light of what might have happened if Conservative ideologies had got to work. But I very much regret that some of the more radical reforms of the 1960s were not introduced. The qualified by ability and attainment to pursue a full-time course in higher

education. The Labour Party has throngs of people among its middle-class members. Curiously, however, all the core contenders for the leadership are peculiarly non-yah especially when Heffer and Hattersley. The thought either of them in Indian sandals and ethnic shirt is about as far away from reality as Harold Macmillan in the kind of get-up. The yah tradition however, goes back some way to a British socialism. In its early days Fabian Society and some of its members had links with the Simple Life, whose creed and practices were remarkably similar to those of many contemporary yah types. Indeed the Beatrice Webb house tradition of eurythmics before breakfast and tea for it still lingers on among some of the society's membership.

Higher education also has its share of yah people among its employees. Some might say that this is because there are so many academics with time on their hands to make their own money and do their own weeding. Others might argue that it indicates that the highly educated who dedicate themselves to providing higher education for others are also more conscious of ecological problems, of the importance of diet and exercise in achieving good health and of the greater respect and practicality of certain kinds of clothes. If anything that seems to me more correct. It is however, certain styles of life become a risk - the sense that they are valued for their own sake rather than for their benefits far beyond their importance and even beyond the central political and ideological issues of today, that they become questionable. It is in these circumstances that my children's mockery and derision is justified.

education should have the opportunity to do so" was a fine one. But what the implementation of Robbins did not achieve was a cultural shift towards the enhancement of the status of science and technology.

Had we succeeded in establishing the five special institutions for scientific and technological education and research recommended in Robbins, and had Tony Crosland's vision of the binary system been fully carried through, we may have had some chance of achieving the fundamental shift in perceptions and aspirations that I would like to have seen. The battle between Robbins' more general degree and the honours degree has also regrettably been lost.

In the light of current political and Conservative perceptions it seems unlikely that we shall be turning in these directions in the near future. Were Kenneth Baker, the Minister for Education Technology, to be elevated to the Cabinet as Secretary of State for Education and Science, then I might have some hope. Under Sir Keith I have none.

The other major post-Robbins regret I had, and still have, is that we have not been able to move which apply the fine principle I referred to earlier. Many young people have the abilities and attainments that qualify them for further education and training courses but these do not have the opportunity to pursue them. It is very difficult to see why school-leavers qualified to undertake an electrical engineering apprenticeship should be largely upon market forces to decide whether they find a place to continue their training, while school-leavers qualified to take an electrical engineering degree do not.

Maybe the Youth Training Scheme will be a first step in that direction.

The author is Social Democrat MP in Thornaby.

## LETTERS TO THE EDITOR

Relations between town and gown

Sir, - While sympathising with the general tenor of many of Colin Radford's comments in his article "Within These Ivory Walls" (*THES*, September 9), one is surprised that he is so out of touch with developments in his own institution. "History day schools", commendable as they are, form a very small proportion of the 350 courses which the school of continuing education organizes countrywide during any one academic year, even a small proportion of the day school programme of 30 to 40 courses of this type offered in each academic year. Regular feedback information gives no credence to the suggestion that teaching staff are not "properly prepared"; if that was so, classes would soon fade away and our rate of cancellations would be much higher than it is.

Of course, "success" is a subjective criterion, but the general reaction in the county of Kent seems to have been almost wholly favourable to the ways in which this university has "opened its doors" to the public, not only through continuing education, but in additional ways which will surely be pointed up by other members of this university. It should also be emphasized that the part-time degree/diploma programme, touched on so lightly by your correspondent, is now registering something approaching 200 students a year and this figure will rise sharply when our Tonbridge centre, financed with the

help of the University Grants Committee and the Kent Education Committee, offers a similar range of courses from October 1984.

There was certainly a time when town/gown relations in Canterbury were poor, to say the least of it, but this has changed radically for the better over the years and it is difficult to see how this university could go much further down this road without distorting its purpose altogether. One looks forward to Dr Radford's new interest in the practical steps that are being taken in this university to bring down the height of the "ivory walls" to one which can easily be scaled by a wider cross-section of the general public.

Yours faithfully,  
Dr A. T. BARBROOK,  
School of Continuing Education,  
University of Kent,  
Canterbury.

Sir, - I would like to make some comments in defence of Colin Radford's article on town/gown relations. In this apparently "arrogantly ignorant" article, E. Bell (*Letters*, September 16) Dr Radford claimed that the buildings of Bristol University were "dead after 4.30pm" when he was there (being a reader in philosophy we may assume this was some time ago), and cited this as symptomatic of a town/gown divide that has become

terribly photocopies should be sent to us at the address below:  
Peter Sedgwick Memorial Volume,  
Pluto Press,  
The Works,  
105a Torrione Avenue,  
London NW52RX.

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RICHARD LUTER  
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MICHAEL SEDGWICK

### Popper question

Sir, - According to Popper himself, "corroboration is an evaluation of past performance." (My italics, p184, *Re-view Philosophique Internationale*, 1971.) That is, corroboration provides no reason for thinking that a theory is any more likely to pass the next test, or that any other - including, let it be noted, theories that have already failed. So what cogent reasons can Popper provide for his claim that we should prefer highly corroborated theories? Popper's first criticism of Popper (*THES*, September 9) is not naive, as Maxwell claims (*Letters*, September 16), but cleared.

### Maths research

Sir, - As part of the post-Cockcroft programme of research sponsored by the DES, the National Foundation for Educational Research is undertaking a national review of current practices in secondary schools in assessing lower-attainers in mathematics.

The research team wishes to contact those who have been involved in developing, or are using any notes of assessment, of these pupils. We would be grateful if you would publicize this review and ask anyone having relevant information to get in touch with Moira Lavery-Callaghan at the NFER, Up-ton Park, Slough, Berks.

Yours faithfully,  
Mrs M. LAVERY-CALLAGHAN,  
Research Officer,  
Mathematics Department.

### Spilled argument

Sir, - What a pity Miles Scott had to spoil a good argument in his letter (*THES*, September 9) by quoting Andy Macmillan. This is rather like quoting the MacDonnells to list the virtues of the Campbells! I am afraid architecture is still stuck with people like Macmillan to whom his own education means when a writer tells them what whisky is available in the restaurant in the Post Office Tower!

Yours faithfully,  
JOHN DRUMMOND,  
Strathclyde University.

### Transport studies

Sir, - I refer to your article (*THES*, September 2) "Demand accelerates for transport studies" which mentioned certain undergraduate courses in transport studies.

The impression given by the article was that here at Plymouth Polytechnic we are concerned only with shipping. It is a fact that we have a Council for National Academic Awards BSc (Honours) degree course in nautical studies with an option in maritime transport and this has been very popular with students.

This is only part of the story, however, because for the past eight years transport studies has been offered as an option in the polytechnic's BSc (Honours) degree in combined studies. In more recent years this has been developed into a major pathway in the degree and undoubtedly has been a great success both from an academic sense and the response from industry. Indeed close links have been established with organizations concerned with road, rail, sea and air transport in the West. Country and research in the polytechnic. The commitment of the polytechnic to transport studies in general as it is taught in the combined studies degree so that graduates are prepared for entering any sector of the transport industry.

Developing undergraduate courses in transport studies has been a long hard haul due largely to the conflicting views held by academics as to whether transport was "more appropriately a postgraduate" or undergraduate subject. I feel this you mentioned in your article. Due largely to the pioneering efforts of the Chartered Institute of Transport, the Organization of Teachers of Transport Studies and academic staff in departments like my own, I believe that transport studies now has a firm foundation as an undergraduate subject and the response from students and industry supports this view.

### Poly monopoly

Sir, - I am grateful to A. Saunders of the National Association for Art Education (*THES*, Letters August 24) for stating the actual situation concerning my charge that the Inner London Education Authority is operating a monopoly position vis-à-vis the National Association of Teachers in Further and Higher Education. Aias, the simple truth of the actual situation for the staff at my college is that none of my colleagues teach art and design, and only one is a principal. It is in this respect that those of us who do not wish to be members of Natfhe are presented with a monopoly.

Yours faithfully,  
P. E. STRACHAN-TIMMS,  
Association of Polytechnic Teachers,  
SW London College.

### Press movement

Sir, - The report on the Pressgange imprint from Glasgow University in the September 9 issue is interesting in that it is but one indication of a general movement. Since 1981 we have been producing a series of *Scottish Papers in General Studies* by similar methods, enabling scholars to publish studies, which a commercial publisher would be unlikely to take on and which students would be unlikely to afford. The system depends, of course, on small overheads, no profit, unpaid editors (and sometimes designers), and often on pump-priming or support from bodies such as the Carnegie Trust

## Seduction by a glint of gold

Sir - One dare not assert that the top people (the cream) of our great institutions of industry, learning and government can be bought, but it is a matter of common observation that their vision may be sharply focused by the glint of gold.

Thus your reports of Dr Robin Nicholson's seminar for top people and of Sir Keith Joseph's essay for the University Grants Committee (*THES*, September 16) engender the fear that once again clean-cut logical solutions will be proposed for the problems of industry and the universities. Thus university science will assist industry and universities will divide into three leagues; the friends of the top people; the worthy workers; the teaching institutions.

May one suggest that such clarity of vision on immediate issues is not necessarily of advantage in the long term.

Universities are about education, not merely about research and development for the military-industrial complex. We hear demands that technologists should be exposed to the realities of the commercial world and that the humanist should have a dose of numeracy, but what about technologists having sight of the enduring universe of the arts? The dichotomy between numbers and hand-waving is well known. Less easily accepted is the possibility that when numbers come into the picture, understanding departs.

Is it time to wave a few hands? For one thing, a too easy acceptance of the technology promotion programme may damage the position of university scholarship in the humane and arts areas.

Also a great disservice to education would ensue, if universities were to become purely teaching institutes. The essence of the traditional university approach in the UK has been to interrelate teaching and research.

Natfhe has not only a collection of approach to the collection and collation of facts, (that is, a "research" approach). How can you ask a teacher to inculcate a research approach if you deny him the practice of research?

HOWARD AXON  
253 Didsbury Road,  
Heaton Mersey,  
Stockport.

### Arms aims

Sir, - Robert Moore (*THES* Letters September 16) expresses interest in knowing whether the Academic Council for Peace and Freedom "is a genuine pressure group for disarmament or simply anti-unilateralist."

As the name of our organization suggests we are "simply" neither. Our object is not to promote disarmament as such but to discuss what may be the proper means for preserving the peace and freedom of this nation.

What links our members is a profound scepticism about whether the sort of measures of one-sided disarmament which Robert Moore apparently favours would be conducive to the preservation of either national freedom or international peace.

Yours faithfully,  
DAVID J. LEVY,  
Secretary,  
Academic Council for Peace and Freedom.

### NAB proposals

Sir, - Your comment about our response to the National Advisory Body proposals (*THES*, September 16) is somewhat misleading. The proposals merely consolidate an expansion that has already occurred and we are to sustain, in real terms, a small cut in budget. There is relief and satisfaction that the last of the polytechnics to be created has been permitted to stabilize at normal size and at normal cost levels.

Yours faithfully,  
ERIC ROBINSON,  
Preston Polytechnic.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them if necessary.

## Exchanging ideas for tolerance

F. B. Singleton on the Dubrovnik Inter-University Centre's tenth anniversary

The Inter-University Centre for Post Graduate Studies which has just celebrated its tenth anniversary, is a remarkable venture in international academic cooperation which could only flourish in a country like Yugoslavia. The initiative was taken by the University of Zagreb, which provides the building in which the centre is housed, the secretarial and technical staff and publishes the courses. The rest of the finance comes from the subscriptions of the 137 affiliated universities and the courses are self-financing, often with help from foundations such as Volkswagen, Siemens and Ford.

To gain approval from the council those wishing to promote courses have to meet a few simple rules, the most important of which is that the course directors must include representatives from at least two different countries, so that international cooperation is built into the structure from the beginning. Interdisciplinary courses are favoured, but there is no bar on highly specialized mono-disciplinary topics - for example, international law, cancer, lacers, disposal of solid wastes, the history of Dubrovnik.

However, the main emphasis has been on the social sciences and philosophy, with topics such as Nietzsche, migration and community relations, Mediterranean studies, industrial relations and European security. Eminent scholars who have participated include Werner Heisenberg, Monica Partridge, Henrik von Wright, Jürgen Habermas, Jeanne Hersch, Charles Taylor and Mihailo Markovic.

Although there have been rumblings of disapproval occasionally from some elements in Yugoslavia, especially from Serbia during the period when the independent minded Praxis group grade University, the academic tradition of the centre has been maintained. It is a great tribute to the open-mindedness of the Yugoslav authorities that the IUC has been able to grow and flourish during periods of political and economic stress.

The Tenth Anniversary was celebrated by a series of seminars and lectures over a period of five days in early September on the theme of interdisciplinarity. The theme was introduced by Dr E. G. Edwards, former vice-chancellor of Bradford University. Other speakers included Dr Müller, chairman of the Bulgarian Academy of Arts and Science and Professor Ørjan Øyeren, rector of Bergen University. In the discussions clear differences of approach to the problems of interdisciplinarity emerge, as must be inevitable when individualistic American academicism from a pluralistic society meet Marxist scholars from Yugoslavia, Bulgaria and Poland.

We heard a novel architect from Gdansk, a humanist philosopher from Oxford, a geographer from Bradford, minister from the Yugoslav government, radical "action researchers" from Denmark, Quakers from USA and an assortment of social scientists from Germany, Sweden and France. It would be difficult to find anywhere else in the world such a collection of academics from different social and political backgrounds who came together because they wanted to exchange ideas in an atmosphere of mutual respect and tolerance. It is regrettable that financial constraints prevented some of the third world members from sending representatives.

The centre provides the physical setting; the participants provide the intellectual stimulus. The city of Dubrovnik is an ideal location for this adventure in international cooperation. Its own architectural history is in itself a result of the blending of several currents in European culture. There was a full programme of concepts to provide refreshment after the day's discussions - from the Monteverdi Choir of Hamburg, the Dubrovnik Symphony Orchestra and the local folkore ensemble. Then, if the participants tired of intellectual and cultural pursuits, it was always possible to immerse oneself in the warm Adriatic.